The University *of* Memphis

2003 - 2004

# Undergraduate Bulletin

MISSISSIPPI VALLEY COLLECTION
UNIVERSITY OF MEMPHIS
UNIVERSITY LIBRARIES
MEMPHIS, TN 38152

Vol. 89 July 2003

**For students whose initial enrollment occurs Fall 2003-Summer 2004, this Bulletin is valid through Summer 2010.**

The **UNDERGRADUATE BULLETIN** contains a detailed description of undergraduate curriculum, admission information, requirements for graduation, and academic regulations. Students may graduate using degree requirements from any valid Bulletin beginning with the year in which they were first admitted to undergraduate study. *http://www.people.memphis.edu/~acadafflib/bulletin/bulletin.htmlx*

The **GRADUATE BULLETIN** contains a description of the University, specific requirements for each graduate program, and Graduate School regulations. *http://www.people.memphis.edu/~gradsch/grad_catalog/linkframe.htm*

The **STUDENT HANDBOOK** provides new students with a brief description of student activities, campus services, policies and procedures related to Student Affairs and the Code of Conduct. Each entering student receives a copy of this publication and is responsible for becoming familiar with the Code of Conduct and the policies and procedures. *http://www.people.memphis.edu/~jaffairs/csc/studexp.htm*

A detailed outline of the registration procedure, individual course offerings (course, time, days, location, and instructor), and course or program revisions made since the publication of the most recent *Undergraduate Bulletin* and *Graduate Bulletin* can be found at the Registrar's web site at *http://www.enrollment.memphis.edu/registrar/* The Academic Calendar listing all deadlines can be found at *http://www.enrollment.memphis.edu/registrar/calendars/academic.htm*

**Campus Directory**

| | |
|---|---|
| Academic Counseling Unit | (901) 678-2062 |
| Academic Transfer and Articulation | (901) 678-2783 |
| Admissions | (901) 678-2111 |
| Bursar's Office | (901) 678-5579 |
| Center for Athletics Academic Services | (901) 678-2714 |
| Center for Student Development | (901) 678-2067 |
| Dean of Students | (901) 678-2187 |
| Financial Aid | (901) 678-4825 |
| General Education Program | (901) 678-2783 |
| Honors Program | (901) 678-2690 |
| President's Office | (901) 678-2234 |
| Provost's Office | (901) 678-2119 |
| Registrar | (901) 678-2810 |

**The University reserves the right to cancel or alter any part of this Bulletin without notice (subject to the following):**

The course offerings and requirements of The University of Memphis are continually under examination and revision. This Bulletin presents the offerings and requirements in effect at the time of publication, but is no guarantee that they will not be changed or revoked. The specific courses or activities constituting the degree requirements for any programs are subject to substitution or alteration at any time prior to completion by the student. This Bulletin is not intended to state contractual terms and does not constitute a contract between the student and The University of Memphis.

The University of Memphis reserves the right to make changes as required in course offerings, curricula, academic policies and other rules and regulations affecting students to be effective whenever determined by the institution. These changes will govern current and formerly enrolled students. Enrollment of all students is subject to these conditions. Any fees, charges or costs, and all academic regulations set forth in this Bulletin are subject to change at any time, and all courses, programs, and activities described in this Bulletin are subject to cancellation or termination by The University of Memphis or the Tennessee Board of Regents at any time.

The University of Memphis provides the opportunity for students to increase their knowledge by providing programs of instruction in the various disciplines and programs through faculty who, in the opinion of the institution, are trained and qualified for teaching at the college level. However, the acquisition of knowledge by any student is contingent upon the student's desire and ability to learn and the application of appropriate study techniques to any course or program. Thus, The University of Memphis must necessarily limit representation of student preparedness in any field of study to the competency demonstrated at that specific point in time at which appropriate academic measurements were taken to certify course or program completion. (TBR 2:04:00:01)

# The University of Memphis

## 2003-2004

### UNDERGRADUATE BULLETIN

MISSISSIPPI VALLEY COLLECTION
UNIVERSITY OF MEMPHIS
UNIVERSITY LIBRARIES
MEMPHIS, TN 38152

SHIRLEY C. RAINES, Ed.D.,
**President**

THOMAS G. CARPENTER, Ph.D.,
**President Emeritus**

The Ninety-first Session Will Open August 18, 2003

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The University of Memphis offers equal educational opportunity to all persons without regard to race, religion, sex, creed, color, national origin or disability. The University does not discriminate on these bases in recruitment and admission of students or in the operation of its programs and activities, as specified by federal laws and regulations. The designated coordinators for University compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 are the Vice President for Student Affairs and the Equal Opportunity Compliance Officer. Information in this document will be provided in alternate format upon request.

The University of Memphis is an Equal Opportunity/Affirmative Action University. It is committed to education of a non-racially identifiable student body.

The University of Memphis is one of 45 institutions in the Tennessee Board of Regents system, the seventh largest system of higher education in the nation. The TBR is the governing board for this system, which comprises six universities, 13 community colleges and 26 area technology centers. The TBR system enrolls more than 80 percent of all Tennessee students attending public institutions of higher education.

The University of Memphis is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award bachelor's, first professional, master's, educational specialist's, and doctoral degrees.

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# 2003-2004 University Calendar

The calendar is subject to change at any time prior to or during an academic term due to emergencies or causes beyond the reasonable control of the institution, including severe weather, loss of utility services, or orders by federal or state agencies. (TBR 2:04:00:01)

A more detailed calendar can be found on the Web at:
*http://www.enrollment.memphis.edu/registrar/calendars/academic.htm*

## REGISTRATION

*http://www.enrollment.memphis.edu/registrar/*

## FALL SEMESTER 2003

AUGUST 18: New faculty orientation, 8:30 a.m.
AUGUST 21: General Faculty meeting, 2:00 p.m.
AUGUST 25: Classes begin.
SEPTEMBER 1: Holiday: Labor Day.
OCTOBER11-14: Fall Break.
NOVEMBER 27-30: Holiday: Thanksgiving.
DECEMBER 3: Classes end.
DECEMBER 4: Study Day.
DECEMBER 5-11: Final examinations.
DECEMBER 14: Commencement.

## SPRING SEMESTER 2004

JANUARY 12: Classes begin.
JANUARY 19: Holiday: Martin Luther King's Birthday.
MARCH 1-7: Spring Break.
APRIL 21: Classes end.
APRIL 22: Study Day.
APRIL 23-29: Final examinations.
TBA: Commencement.

## PRE-SUMMER SESSION 2004

MAY 17: Classes begin.
MAY 31: Holiday: Memorial Day.
JUNE 3: Pre-Summer classes end.
JUNE 4: Pre-Summer final examinations.

## FIRST SUMMER SESSION 2004

JUNE 7: Classes begin.
JULY 4: Holiday: Independence Day.
JULY 8: First Summer classes end.
JULY 9: First Summer final examinations.

## SECOND SUMMER SESSION 2004

JULY 13: Classes begin.
AUGUST 12: Second Summer classes end.
AUGUST 13: Second Summer final examinations.

## FULL SUMMER SESSION 2004

JUNE 7: Classes begin.
JULY 2-5: Holiday: Independence Day and Summer Break.
AUGUST 12: Full Summer classes end.
AUGUST 13: Full Summer final examinations.
AUGUST 15: Commencement.

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**Study Day.** The day prior to final examinations during most regular semesters. No academic activities shall be scheduled on Study Day. No study or review sessions that the student may feel obligated to attend may be scheduled.

**Final Examination Period.** No examination shall be given at a time other than the scheduled time except with written permission from the department chair and the college dean. No social or athletic functions shall be scheduled during the Final Examination Period.

Intercollegiate athletics are excepted from the above policies.

Visit The University of Memphis homepage on the web at *http:www.memphis.edu*

# 2004-2005 Tentative Calendar

This calendar is tentative, and students should check *http://www.enrollment.memphis.edu/registrar/calendars/academic.htm* for possible changes and/or additions.

## REGISTRATION

*http://www.enrollment.memphis.edu/registrar/*

## FALL SEMESTER 2004

AUGUST 30: Classes begin.
SEPTEMBER 6: Holiday: Labor Day.
OCTOBER 16-19: Fall Break.
NOVEMBER 25-28: Holiday: Thanksgiving.
DECEMBER 8: Classes end.
DECEMBER 9: Study Day.
DECEMBER 10-16: Final examinations.
TBA: Commencement.

## SPRING SEMESTER 2005

JANUARY 17: Holiday: Martin Luther King's Birthday.
JANUARY 18: Classes begin.
MARCH 7-13: Spring Break.
APRIL 27: Classes end. Faculty convocation.
APRIL 28: Study Day.
APRIL 29-MAY 5: Final examinations.
TBA: Commencement.

## PRE-SUMMER SESSION 2005

MAY 16: Classes begin.
MAY 30: Holiday: Memorial Day.
JUNE 2: Pre-Summer classes end.
JUNE 3: Pre-Summer final examinations.

## FIRST SUMMER SESSION 2005

JUNE 7: Classes begin.
JULY 4: Holiday: Independence Day.
JULY 7: First Summer classes end.
JULY 8: First Summer final examinations.

## SECOND SUMMER SESSION 2005

JULY 12: Classes begin.
AUGUST 11: Second Summer classes end.
AUGUST 12: Second Summer final examinations.

## FULL SUMMER SESSION 2005

JUNE 6: Classes begin.
JULY 1-4: Holiday: Independence Day and Summer Break.
AUGUST 11: Full Summer classes end.
AUGUST 12: Full Summer final examinations.
TBA: Commencement.

# 1. Description of the University

## The University of Memphis Statement of Mission

The University of Memphis is a doctoral degree-granting urban research university committed to excellence in undergraduate, graduate, and professional education; in the discovery and dissemination of knowledge; in service to the metropolitan community, State, and nation; and in the preparation of a diverse student population for successful careers and meaningful participation in a global society. The University of Memphis remains committed to the education of a nonracially identifiable student body and promotes diversity and access without regard to race, gender, religion, national origin, age, disability, or veteran status.

## General Description

### Description of the University

From the opening of its doors in 1912 as a normal school for training teachers to its present status as one of Tennessee's two comprehensive universities, The University of Memphis has been thrust forward by the growth of Memphis and the Mid-South. A town oriented to a rural economy and culture in 1900 grew into a large urban and commercial center mid-century, and the city's public institution of higher learning experienced comparable growth.

The metropolitan and regional requirements for more highly trained university graduates have, of necessity, caused the University to expand all its offerings in arts and sciences, business, the fine arts, education, engineering and technology, law, and several special professional fields. Degrees range from the baccalaureate through the doctorate. Approximately 80 percent of the full-time faculty have earned the highest possible degree in their fields. The University strives to optimize its resources in its quest for excellence through teaching, research and service.

With an enrollment of over 20,000, The University of Memphis is committed to developing programs of the highest caliber, for only through such a commitment will it be a standard of quality in higher education for the citizens of our service area. As the comprehensive university of the State University and Community College System of Tennessee, The University of Memphis is striving to increase the ratio of doctoral programs it offers, which will also require an increased emphasis on research and scholarship activity. The University is committed to serving a diverse student body of all races, sexes and nationalities. Our students are expected, upon graduation, to be able to compete effectively with their counterparts from any other respected university in the nation.

### History

The roots of The University of Memphis date back to September 12, 1912, with the establishment and beginning of classes at West Tennessee State Normal School, which provided for the training of primary and secondary education teachers. However, the seeds for the normal school's creation had been sown three years earlier when the Tennessee General Assembly passed a General Education law calling for establishment and maintenance of three normal schools, one school located in each of the three grand divisions of the state.

The eastern edge of Memphis became the site for West Tennessee State Normal School, which in 1929 became West Tennessee State Teachers College. In 1941, the college expanded its liberal arts curriculum, and the name was changed to Memphis State College, an institution serving three to four thousand students. The undergraduate program was reorganized into three schools and a graduate school was added in 1951.

Memphis State achieved university status in 1957, and on July 1, 1994, the name was officially changed to The University of Memphis.

### Governing Body

The governance and control of The University of Memphis is vested in the Tennessee Board of Regents. The composition and powers of the Board are set forth in Tennessee Code Annotated 49-8-201 through 49-8-203. The Board consists of 18 members; 12 lay citizens appointed for six-year terms by the Governor from each congressional district and grand division of the State; one faculty member appointed for a one-year term; one student appointed for a one-year term by the Governor from among the System institutions; and four ex-officio members – the Governor, the Commissioner of Education, Commissioner of Agriculture, and Executive Director of the Tennessee Higher Education Commission.

### Organization

The schools and colleges that make up the University are the Graduate School, the Cecil C. Humphreys School of Law, the University College, the Loewenberg School of Nursing, the School of Audiology and Speech-Language Pathology, and five colleges offering graduate and undergraduate programs: the College of Arts and Sciences, the Fogelman College of Business and Economics, the College of Communication and Fine Arts, the College of Education, and the Herff College of Engineering. The institution also offers a University Honors Program for highly motivated students seeking exceptional and challenging programs of study in a variety of disciplines. The colleges, departments, and the undergraduate degree programs they offer are described in more detail in the *Colleges and Degree Programs* section of this *Bulletin*.

## The Memphis Community

Memphis, with a metropolitan area population of just over one million, is one of the South's largest and most attractive cities. As a primary medical, educational, communication, distribution and transportation center, Memphis offers a rich and full range of research opportunities and cultural experiences. The city, known worldwide for its musical heritage, has many fine restaurants, museums, and theaters, as well as one

of the nation's largest urban park systems. Annual events include the St. Jude Liberty Bowl Football Classic, the Memphis in May International Festival, the Federal Express St. Jude Golf Classic, the Great River Carnival and the Mid-South Fair. The medical complex in Memphis is the South's largest and one of the nation's foremost centers of medical research. A public transportation system provides easy travel between the University and other parts of the city.

Built on bluffs overlooking the Mississippi River, Memphis is devoted to preserving its history while vigorously building its future. Clusters of stately old homes dot the city; some are still inhabited, others preserve the past as museums, some have been restored and recast into commercial establishments; all are home to images from a long-ago time.

The University's modern and beautifully landscaped campus is centrally located in an attractive residential area of Memphis with shopping, recreation and entertainment centers nearby. In addition to the main campus facilities, the University has research and athletic training facilities and married student housing on the South Campus, as well as teaching sites throughout West Tennessee.

# Academic Program Accreditation

The University of Memphis is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award bachelor's, first professional, master's, educational specialist's and doctoral degrees. The various colleges, schools, departments and the individual programs are accredited by the following accrediting agencies:

Accreditation Board for Engineering and Technology

Accrediting Commission on Education for Health Services Administration

Accrediting Council on Education in Journalism and Mass Communication

American Assembly of Collegiate Schools of Business

American Bar Association

American Chemical Society

American Dietetic Association

American Association of Family and Consumer Science

American Psychological Association

American Speech-Language-Hearing Association

Council for Accreditation of Counseling and Related Education Programs

Council on Rehabilitation Education

Council on Social Work Education

National Association for Sport and Physical Education

National Association of Schools of Art and Design

National Association of Schools of Music

National Association of Schools of Public Affairs and Administration

National Association of Schools of Theatre

National Council for Accreditation of Teacher Education

National League for Nursing Accrediting Commission

Planning Accreditation Board

Sport Management Program Review Council

# Facilities, Research, and Services

## Academic Common Market

Participation in the Academic Common Market allows qualified students from southern states to pay in-state tuition while pursuing certain degree programs at The University of Memphis. This arrangement is available only for students whose home states do not offer the designated program. The state in which the student resides determines which of the programs offered by The University of Memphis it will make available to its students.

The Academic Common Market is sponsored by the Southern Regional Education Board (SREB). Participating states are Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia (Florida and Texas grant access for graduate level programs only). Current SREB common market guidelines and requirements may be found on the web at *http://www.sreb.org/programs/acm/acm/searchacm.asp*.

Students may request through their home state coordinators that additional programs be made accessible. A list of the state coordinators with their addresses and telephone numbers may be obtained from the Office of Curriculum Planning or from the Academic Common Market web site at *http://www.sreb.org/programs/acm/acm/searchacm.asp*.

In addition to certification requirements which the student's state of residence may specify, the following pertain: (1) students must be fully admitted to a degree program that has been approved as an Academic Common Market program (nondegree students are ineligible); (2) students must obtain a letter certifying residency, term of entry and approval for the particular University of Memphis program from their state's Academic Common Market coordinator.

**NOTE:** After enrollment, students remain eligible for in-state tuition only so long as they are continuously enrolled-consecutive fall and spring terms-in the *same* major for which they were originally certified. If students change major, they must process a *Change of Major* through their advisor and notify the Office of Admissions to change the Academic Common Market residency code on their records. **Failure to process the Change of Major and to notify Office of Admissions may subject the student to out-of-state fees for all subsequent terms of enrollment in classes for a major other than the one for which the student received ACM certification.** Missing a fall or spring term of enrollment or a change of major requires that the student be recertified through the ACM coordinator in the student's state of residence.

## Library Facilities

The University Libraries include the Ned R. McWherter Library and four branch libraries: Audiology and Speech-Language Pathology, Chemistry, Mathematical Sciences, and Music. Each branch is contiguous to the department or school it serves.

The University Libraries' collection totals over one million print volumes. The collection also contains information resources in many other formats, including 3.4 million microform pieces, over 9 million archival pieces, 90 licensed databases, 500 federal databases, and a variety of other formats. The Government Publications Department, located in McWherter Library, is the Regional Depository for Federal Documents for the State of Tennessee. The department also serves as a depository for all State of Tennessee documents. The Special Collec-

tions Department houses collections of original papers, manuscripts, and rare materials that document the history and culture of the mid-south.

The University Libraries' holdings are indexed in the tomCat online catalog, which is available on over 200 workstations located throughout the libraries, on the campus network, and through the Internet. Faculty and staff of the University Libraries are available to assist library users with identifying and making the best use of library resources. The Interlibrary Loan staff will borrow resources from other libraries when they are not owned by the University Libraries. The University Libraries maintains agreements with several local academic libraries that enable direct borrowing by students, faculty, and staff of the University of Memphis. For more information on library services or resources, contact the Reference Department or visit the libraries web site at *http://www.lib.memphis.edu/*.

### Information Systems

The University of Memphis provides its students with access to the largest public computing resource within a 100-mile radius of Memphis. Local area networks (LANS), microcomputers, and a variety of peripherals devices (printers, scanners, plotters, etc.) are connected to an optical fiber network that covers virtually the entire 1,060 acre campus. In additions, the network is accessible via dial-in services and by using other Internet Service Providers (ISPs) and Information Systems will soon provide the campus with wireless access to our network. The Help Desk (678-8888) can provide information on how to apply for access to any of the services provided by Information Systems.

U of M students, faculty, and staff have access to more than 1200 computers (both IBM PC compatibles and Apple Macintosh machines) through 54 labs located throughout campus and at 3 remote sites. In addition, more than 30 computing labs are available in the nine schools and colleges that comprise The University of Memphis. Many of these labs house special purpose software and specialized systems such as the Smith Super-lab Cluster that provided a complete parallel computing environment for research and instruction in areas requiring heavy computational computing.

Information Systems (I.S.) is responsible for providing all central computing support for administrative systems. I.S. designs and manages the infrastructure that supports these systems as well as those for instructional programs and scholarly research. The schools and colleges operate on a distributed design that uses local support provides (LSPs) as the first line of support for departmental computing with additional support and expertise provided by I.S. Training on a wide variety of software applications is managed through the I.S. Training Center that provides formal training for students, faculty, and staff.

The University of Memphis is actively engaged in supplying instruction via the World Wide Web and providing staff support for faculty development of courseware through participation in a national consortia such as the MERLOT Group and as a member of the Early Adopter of Internet-2. Web access to information at U of M is provided by I.S. in cooperation with Marketing and Advancement via the I.S. the Web Team (one of several self-directed teams with Information Systems). I.S. established standards and support for web-page development throughout the University.

Information Systems is a key support unit in assisting The University of Memphis achieve it goal of assuring that every graduate of the U of M is technologically fluent; that is, graduates who not only are capable of using and understanding technology within their discipline and the world in which they live, but also capable of learning new technologies as they arise and understand how technology influences changes in the world in which we will live.

### Benjamin Hooks Institute for Social Change

The Institute pursues a broad programmatic agenda of research and outreach that builds upon Dr. Hooks' lifetime of work to achieve a more just society. The Hooks Institute is committed to advancing the goals of the American Civil Rights Movement, and making Memphis a national center for the study of the Civil Rights Movement and its legacy.

### Sparks Bureau of Business and Economic Research

The Sparks Bureau of Business and Economic Research is the organized research and public service unit of the Fogelman College of Business and Economics. The programs of the bureau include public service to government agencies (state and local) and the business community, continuing education, and applied general research.

### Center of Applied Psychological Research

The Center for Applied Psychological Research supports research on problems concerning health, mental health, education, schools, crime, the environment, and children and their families. The Center also supports basic scientific research in cognitive psychology, biopsychology, social psychology, developmental psychology, and research design and statistics.

### Center for Earthquake Research and Information

The Center for Earthquake Research and Information was established in 1977 by the Tennessee Legislature to provide: (1) prompt reports and background information on regional earthquakes; (2) scientific research on the causes and effects of earthquakes and on the possibility of earthquake prediction; (3) studies related to the desirability of earthquake resistant construction; (4) advice to business, government, and the public on the methods, means, and feasibility of mitigating earthquake hazards.

The Center operates as a research organization of The University of Memphis and was designated as a Tennessee Center of Excellence in 1985. It supports graduate research in geophysics, active tectonics, and earthquake engineering. It cooperates with the Department of Earth Sciences in offering a Bachelor's and Master's degree concentration in geophysics, and a Ph.D. degree in earth sciences.

### Center for Research in Educational Policy

The Center for Research in Educational Policy is funded by the State of Tennessee as one of five Centers of Excellence located at The University of Memphis. CREP's mission is to implement a research agenda associated with educational policies and practices in the preK-12 public schools of Tennessee and the nation and to provide a knowledge base for use by educational practitioners and policymakers. Research outcomes are intended to not only describe the complexities of educational phenomena, but also offer recommendations for action.

Since 1989, the Center has served as a mechanism for mobilizing community and university resources to address educational problems and to meet the University's commitment to primary and secondary schools. The Center's research agenda is developed through analysis of persistent or emerging issues in schools and their communities, changes occurring

in teacher education programs, and recommendations from educational authorities. In the past decade, CREP has gained national recognition for its contribution to discussions of issues such as reform of teacher education, educational equity, educational technology, school reform and restructuring, urban and multicultural education, interventions for at-risk students, and using formative evaluation methods for school improvement decision-making.

### Center for Health Services Research

The Center for Health Services Research is housed in the Division of Health Administration. The Center emphasizes collaborative, multi-disciplinary research focusing on issues in health care management, leadership, financing, economics, and administration. The Center's goal is to serve as a strong partner and resource for health care organizations, both public and private, in the Mid-South region.

### Center for Manpower Studies

The Center for Manpower Studies, located in the Fogelman College of Business and Economics, conducts research on employment and training-related topics and provides technical assistance to federal, state, and local agencies. It also offers a variety of training programs for human resource development agencies throughout the southeast.

### Center for Research on Women

Founded in 1982, the Center for Research on Women (CROW), located in the College of Arts and Sciences is nationally recognized for its pioneering work on race, class, and gender. CROW's mission is to conduct, promote and disseminate scholarship on women and social inequality. Its approach to research, theory and programming emphasizes the structural relationships among race, class, gender and sexual identity, particularly in the U.S. South and among women of color. CROW-affiliated faculty span the University. They are currently engaged in action-oriented, community-based research on women in Memphis and the U.S. South; historically grounded research that makes visible global processes affecting the persistence of inequalities in the U.S. South; and the development of feminist theories and methods. CROW offers postdoctoral fellowships to scholars studying race and gender in the U.S. South, and provides graduate assistantships to students enrolled in the M.A. program in sociology.

### Center for the Study of Higher Education

The Center for the Study of Higher Education, located in the College of Education, conducts research and sponsors workshops and conferences in higher and adult education. The Community College Student Experiences Questionnaire is located in the Center, as is the Leadership Institute in Judicial Education.

### Center for Urban Research and Extension

The Center for Urban Research and Extension provides technical assistance, research and other services for neighborhood improvement in three Memphis Enterprise Neighborhoods. The Center supports the City of Memphis' Enterprise Community program, and collaborates with neighborhood residents as they embark upon various efforts in revitalizing their neighborhood.

### Chucalissa Indian Village and Museum (C. H. Nash Museum)

This partly reconstructed prehistoric Indian village on its original site and the museum are operated by the Department of Anthropology as an educational and research facility. The indoor and outdoor exhibits are designed to reconstruct prehistoric Indian life in the Mid-South. Students are trained in the techniques of excavation, restoration and museum operations. The courses taught are listed in the Department of Anthropology offerings. Chucalissa is located 17 miles from the main campus.

### DNA Laboratory

The DNA Laboratory is a university facility providing access to resources required for modern molecular biology research. Custom nucleic acid synthesis and automated DNA sequencing are available on a fee basis to researchers both inside and outside the University. The Laboratory also houses a high-performance gel documentation system and a workstation with the GCG Wisconsin Package for nucleic acid and protein analysis.

### Ecological Research Center

The Ecological Research Center (ERC) of the Department of Biology was established in 1974 on the South Campus of the University to conduct and coordinate research, teaching, and service activities in ecology and related areas. Major areas of research include: fish culture, wildlife biology, endangered and threatened species, systematics, reproductive physiology, and physiological responses to the environment. The ERC has formal research agreements with private, state, and federal organizations to jointly pursue biological problems of mutual interest. The US Fish and Wildlife Service, Wildlife and Habitat Management Office, has offices in the ERC. The teaching program of the ERC provides training for students interested in pursuing careers in various fields and affords an opportunity for students to participate in activities involving contemporary environmental problems. Public service activities are directed toward promoting environmental awareness and providing information and consultation services to those concerned with the environment.

### Edward J. Meeman Biological Station

The Edward J. Meeman Biological Station was established in 1967 to encourage and foster scientific pursuits in natural history, ecology, and environmental biology. Situated on two sites, the main research area encompasses over 600 acres adjacent to Meeman-Shelby Forest State Park. The second site sits on over 300 acres along the Loosahatchie River in Bartlett. The research sites provide laboratory, classroom, and small conference facilities to faculty and students from The University of Memphis and visiting researchers. Meeman Station is an integral part of the Department of Biology and a unique site dedicated to research, teaching, and community service.

### Integrated Microscopy Center

The Integrated Microscopy Center provides facilities and expertise in the field of light, coufocal and electron microscopy. Users of the center include researchers and graduate students in the biological and physical sciences.

### The Institute of Egyptian Art and Archaeology

The Institute, founded in 1984 and designated a Tennessee Center of Excellence in 1985, is a component of the Art Department at The University of Memphis. The Institute is dedicated to the study of the art and culture of ancient Egypt through teaching, research, exhibition, and excavation. It is staffed by Egyptologists who are faculty members of the Art Department and the History Department. Its research library consists of more than 6000 Egyptological books and periodicals including rare and out-of-print volumes. Supporting the Institute's programs is the Art Museum at the University of Memphis, which houses the Institute's growing collection of Egyptian antiquities, the largest in the Mid-South. The Institute also sponsors an epigraphic project at the Great Hypostyle Hall of Karnak Temple, Luxor, Egypt.

### Institute for Intelligent Systems

The Institute is designed to bring together research and training in the broad areas of cognitive science, complex dynamical systems, artificial intelligence, and massively parallel computing (neural computing). Current research includes basic research supported by grants from funding agencies and applied research supported by industrial/governmental contracts. Ideas and techniques for research are gathered from the disciplines of cognitive psychology, computer science, philosophy of mind, neuroscience, linguistics, and mathematics. Training includes graduate courses, thesis and dissertation research, and industrial training in the form of workshops, seminars, and employee research participation.

### The Marcus W. Orr Center for the Humanities

The Center promotes interdisciplinary research and teaching in the humanities at The University of Memphis. Its various programs, including several lecture series and the sponsorship of visiting scholars, faculty seminars and symposia, are designed to encourage scholarly collaboration across departmental and college boundaries. It also seeks to promote the University's scholarly resources in the Memphis community, by offering a variety of public programs. The Center was founded in 1987, and renamed in 1991 in honor of former history professor, Dr. Marcus W. Orr.

### Regional Economic Development Center (REDC)

The Regional Economic Development Center represents the University in its outreach function in the field of economic development planning. In providing technical and management assistance to the public and private sectors, the Center also serves as a laboratory for interdisciplinary research and service by faculty and graduate students in solving problems of urban and regional development. The Center's professional planning staff have academic appointments and teach courses in City and Regional Planning. REDC is an outreach unit of the School of Urban Affairs and Public Policy.

### Speech and Hearing Center

Located at 807 Jefferson Avenue in the medical center of Memphis, this facility became affiliated with the University in 1967. An additional site is located on the South Campus in building #44. Both locations serve children and adults with communication disorders. Students at the University are seen at no charge, while faculty and staff are seen for 50% of normal charges. The University administers and operates the center in cooperation with the Board of Directors of the Memphis Speech and Hearing Center, Inc.

### Other Research Units

In addition to the units described above, The University of Memphis also recognizes a wide array of other research oriented units:

Anthropological Research Center
Barbara K. Lipman Early Childhood School and Research Institute
Bureau of Sport and Leisure Commerce
Center for Community Health (joint with UTMemphis)
Center for River Studies
Computational Research on Materials Institute at The University of Memphis
Exercise and Sport Science Laboratories
Federal Express Center for Cycle Time Research
Groundwater Institute
Institute for Gambling Education and Research
National Science Foundation Industry/University Cooperative Research Center for Bio-Surfaces Site
Neuropsychology Research Laboratory
Oral History Research Office
Robert Wang Center for International Business
Southern Music Archive
Transportation Studies Institute
W. Harry Feinstone Center for Genomic Research

### Recognized Centers and Chairs of Excellence

The University of Memphis has been designated by the Tennessee Higher Education Commission as a location for centers and chairs of excellence. The units listed below receive special funding by the state in recognition of their status.

*Centers of Excellence*
- Center for Applied Psychological Research
- Center for Earthquake Research and Information
- Center for Research in Educational Policy
- Center for Research Initiatives and Strategies for the Communicatively Impaired
- Center of Excellence in Egyptian Art and Archaeology

*Chairs of Excellence*
- Arthur Andersen and Company Alumni Chair in Accounting
- Bornblum Chair in Judaic Studies
- Federal Express Chair in Management Information Systems
- W. Harry Feinstone Chair in Molecular Biology
- W. Harry Feinstone Chair in Functional Genomics
- Morris S. Fogelman Chair in Real Estate
- Helen and Jabie Hardin Chair of Economics/Managerial Journalism
- Jabie Sanford Hardin III Chair in Combinatorics
- Herbert Herff Chairs in Biomedical Engineering
- Herbert Herff Chair in Law
- Dorothy K. Hohenberg Chair in Art History
- William A. and Ruth F. Loewenberg Chair in Nursing
- Plough Chair of Excellence in Audiology and Speech-Language Pathology
- William M. Morris Chair in International Economics
- Lillian and Morrie Moss Chair in English
- Lillian and Morrie Moss Chair in Philosophy
- Lillian and Morrie Moss Chair in Psychology
- Lillian and Morrie Moss Chair in Urban Education
- Sales and Marketing Executives, Inc. Chair in Sales
- Sparks Family Chair in International Business
- Thompson-Hill Chair in Accounting
- University of Memphis Chair in Free Enterprise Management
- Robert Wang Chair in International Business
- Wunderlich Chair in Finance

### Academic Personnel Services

The Office of Academic Personnel Services conducts The University of Memphis' program for student evaluation of instruction. The Student Instructional Rating Systems (S.I.R.S.) uses a comprehensive approach for collecting, analyzing, and reporting student reactions to certain aspects of classroom instruction. All teaching faculty are required to participate in the student evaluation program. S.I.R.S. are not to be administered during the week of final exams. Faculty receive the completed forms and a computer generated summary at the beginning of the following semester. These documents, which are an important part of the dossier prepared for tenure and promotion, also provide useful information to individual faculty members for course development and/or improvement of instruction.

### Mid-South ACT (Access Center for Technology)

Mid-South ACT provides services for individuals of all ages with disabilities in the areas of assistive technology and augmentative alternative communication in West Tennessee, East Arkansas, and North Mississippi. These technologies allow all individuals with special needs access to the world. The Center provides services and information to teachers, students, consumers, and caregivers regarding assistive technology. This is a "hands on" Center set up for the purposes of hardware and software preview and assistive technology evaluation.

### International Students Office in the Center for International Programs and Services

The International Students and Services Office in the Center for International Programs and Services advises international students, faculty, staff, visiting scholars, and researchers regarding federal immigration regulations, health insurance matters, employment issues and personal concerns. In addition, the Office prepares federal documents necessary for international faculty, staff, and visiting scholars' entrance into the United States. This includes H, TN, O, and J visas for faculty and staff.

The Office also produces the federally mandated orientation for F-1 and J-1 visa holders new to campus. This provides information on federal and state laws and university policies, including social security and employment regulations, taxes, visa renewals, and all aspects of their legal non-immigrant status inside US borders. The International Students Office also frequently provides this information for in-country dependent family members of students, faculty, and researchers on campus, as well as to international applicants to the University and area colleges and university staff. The office also advises the International Students Association and several international student clubs. The International Students Association presents an annual International Night, the International Film Series, and various other cultural events. For more information, call 678-4271 or visit the website at: *cipsweb.memphis.edu*.

### Psychological Services Center

The Psychological Services Center offers both psychological evaluations and therapeutic services to children and adults.

### Alumni

The University of Memphis Alumni Association has offices located in the Alumni Center on campus. The staff serves The University of Memphis Alumni Association and provides a communication linkage to the University for graduates and former students. The Alumni Association and staff also offer special services for current students and serve as the sponsors for the University's Student Ambassador Board.

### Oak Ridge Associated Universities

Since 1971, students and faculty of The University of Memphis have benefited from the University's membership in Oak Ridge Associated Universities (ORAU) is a consortium of 87 colleges and universities and a management and operating contractor for the United States Department of Energy (DOE) located in Oak Ridge, Tennessee. ORAU works with its member institutions to help their students and faculty gain access to federal research facilities throughout the country; to keep its members informed about opportunities for fellowship, scholarship, and research appointments; and to organize research alliances among its members.

Through the Oak Ridge Institute for Science and Education, the DOE facility that ORAU manages, undergraduates, graduates, postgraduates, as well as faculty enjoy access to a multitude of opportunities for study and research. Students can participate in programs covering a wide variety of disciplines including business, earth sciences, epidemiology, engineering, physics, pharmacology, ocean sciences, biomedical sciences, nuclear chemistry, and mathematics. Appointment and program length range from one month to four years. Many of these programs are especially designed to increase the numbers of under represented minority students pursuing degrees in science- and engineering-related disciplines.

A comprehensive listing of these programs and other opportunities, their disciplines, and details on locations and benefits can be found in the Resource Guide, which is available on the World-Wide Web at *http://www.orau.gov/orise/resgd/htm*, or by calling either of the contacts below.

ORAU's Office of Partnership Development seeks opportunities for partnerships and alliances among ORAU's members. Private industry, and major federal facilities. Activities include faculty development programs, such as Junior Faculty Enhancement Awards and the Visiting Industrial Scientist Program, and various services to chief research officers.

For more information about ORAU and its programs, contact the Vice Provost for Research, ORAU Council member, at 901-678-2590; contact Monnie E. Champion, ORAU Corporate Secretary, at 423-576-3306; or ORAU Home Page at *http://www.orau.gov*.

### Extended Programs

THE OFFICE OF PUBLIC SERVICE serves as a prime contact for individuals and organizations outside the University. Through this office, access may be gained to University facilities and resources.

THE MEMPHIS SMALL BUSINESS DEVELOPMENT CENTER is organized to provide business development services to new and existing small business firms throughout west Tennessee. These services add to the economic development efforts of the local communities by adding and retaining employment. Special attention is given to women, minority, and veteran-owned businesses.

JACKSON CENTER, located on the campus of Jackson State Community College, offers a wide variety of undergraduate and graduate courses and degree programs to students living in the Jackson area. In addition, the Jackson Center houses the Office of Extended Programs, which coordinates

course and program delivery at various locations in West Tennessee.

THE CONTINUING EDUCATION SHORT COURSE PROGRAM serves as an important link to the Memphis community, providing comprehensive, non-credit programs ranging from professional development to personal enrichment. The program is designed to narrow the education gap left by the degree-awarding academic programs at The University of Memphis, thus complementing the University's mission of service to the community. The program is strongly service-oriented, providing general interest instruction to learners of all ages, regardless of their educational background. The Short Course Continuing Education product is high quality, affordable, and requires no formal admission to the University.

# The Graduate School

The Graduate School of The University of Memphis is the center of advanced study and research within the University. The basic objectives of the Graduate School are as follows:

1. to preserve and disseminate knowledge;
2. to extend knowledge through research; and
3. to prepare men and women to assume responsible and useful roles in a changing society.

The Doctor of Philosophy degree is awarded in audiology and speech pathology, biology, biomedical engineering, business administration, chemistry, communication, counseling psychology, engineering, geophysics, history, mathematics, music, philosophy, and psychology. The degrees of Doctor of Education and Doctor of Musical Arts are awarded by the College of Education and the College of Communication and Fine Arts, respectively. The College of Education also offers the degree of Education Specialist with a major in education. The Cecil C. Humphreys School of Law offers the Juris Doctor degree.

Master's degrees are offered in forty-four major areas through five colleges and one independent school. The degrees include Master of Science, Master of Arts, Master of Fine Arts, Master of Arts in Teaching, Master of Business Administration, International Masters of Business Administration, Master of Music, Master of City and Regional Planning, Master of Health Administration, and Master of Public Administration.

Visit the Graduate School homepage on the web at *http://www.people.memphis.edu/~gradsch/*

# Cecil C. Humphreys School of Law

The Cecil C. Humphreys School of Law offers a program of instruction leading to the degree of Juris Doctor.

Admission to the Cecil C. Humphreys School of Law is on a selective basis. To be eligible for admission, a student must have received a bachelor's degree from an accredited college or university and must have made a satisfactory score on the Law School Admission Test. Questions concerning additional admissions requirements should be addressed to the Assistant Dean for Admissions, Recruitment, and Scholarships at *uofmlaw@profnet.law.memphis.edu*. The regulations and policies of the School of Law are set out in greater detail in the Law School Bulletin, a separate publication of The University of Memphis Bulletin.

# 2. Services to Students

## Enrollment Services

Enrollment Services provides "excellent service" for all students enrolled at The University of Memphis. Included in Enrollment Services are: Office of Admissions; Office of Student Relations and Orientation Services; Office of Student Financial Aid (including the University Scholarship Program); Office of the Registrar (including an Evening Branch Office); and the Enrollment Systems Office.

## 1. Admissions

### Admission to the University

The University of Memphis offers equal educational opportunity to all persons without regard to race, religion, sex, creed, color, national origin, or disability. Inquiries about admission to any college of the University should be addressed to the Office of Admissions. This office receives and processes all applications, evaluates credentials, and issues notices of acceptance to qualified students. Undergraduate students may enter at the beginning of either of the fall or spring semesters or at the beginning of any term of the summer session.

The University of Memphis encourages all those who feel they can benefit from the educational opportunities offered by the institution to file an application for admission. Consideration is given to age, educational background, entrance examination scores, high school grades, any college attendance, and any other special talents and/or special circumstances, which may affect the applicant's academic performance.

Certain instructional programs of the University are subject to special admission requirements and are subject to change according to the availability of institutional resources. Students wishing to enter one of these programs of study should check with the appropriate department or division offering the program in order to become familiar with these special requirements. Undergraduate programs with special admission requirements include, but are not limited to, professional degrees in art, music, or theatre (Bachelor of Fine Arts or Bachelor of Music), teacher education, educational services, nursing, and the University College.

Students are encouraged to apply as early as possible. Early admission contributes to better orientation, course planning, class scheduling and financial aid consideration. High school students planning to apply as freshmen should submit applications as soon as possible after completion of the junior year. Applications for admission are available from many secondary school/guidance counseling offices and from Student Relations, Orientation, Recruitment Office, The University of Memphis, Memphis, TN 38152. All credentials become the property of the University and cannot be forwarded or returned.

Credentials will be maintained in active files for a 12-month period. After this period, credentials will be relegated to inactive status and must be submitted again before an admission decision can be made.

Regulations in this section are subject to change without notice.

### Admission as Degree-Seeking Undergraduates

The deadlines for submitting applications for admission are: August 1 for the fall semester, December 1 for the spring semester, and May 1 for the summer session. While application deadlines are listed above, registration for new students occurs much earlier. For example, fall new students register in June. Applications received after these deadlines may be delayed in processing or processed at the non-degree level.

#### Freshman Applicants

An applicant who has *no* previous college enrollment may be considered for admission as a regular undergraduate freshman by submitting the following to the Admissions Office:

1. **A final transcript of all high school credits:** Early decisions can be made by submitting partial transcripts (6th or 7th semester). Transcripts carried by the student are not acceptable for the admissions file. If any courses have been taken for college credit, the institution(s) granting credit must be contacted and asked to send an official transcript to The University of Memphis, Office of Admissions. Students who do not present one unit of American History are required to register for the course during their first or second year at the university.

   Graduates of an unapproved or non-accredited high school must take the General Educational Development (GED) test and earn an average standard score of at least 45. Graduates of home schools must comply with state law by submitting proof of registration with the local education agency which the child would otherwise attend with the high school transcript. Students who have achieved a high school diploma through the General Education Development (GED) Test must also have the GED scores sent to the Office of Admissions.
2. **The score report of the American College Testing program (ACT) or the Scholastic Aptitude Test (SAT):** The score report is a necessary part of the application and the test date should be no more than three years old at the time of enrollment.

   Applicants who are offered admission with the enhanced ACT composite, English or math subscores less than 19, or the equivalent on the former ACT, will be required to take a placement examination prior to enrollment. Based on the results of the assessment, these applicants may be required to successfully complete Transitional Academic Studies (DSP) courses prior to enrolling in degree credit courses. (See Transitional Academic Studies program description in the *Independent Programs* section of this *Bulletin*.)
3. **A non-refundable application fee of $15.00.**
4. **Any additional items and information requested in the application materials by the Office of Admissions.**

Student success at The U of M is strongly predicted by academic performance in high school and is also linked to performance on the ACT. Therefore, an Admission Index will be calculated for each applicant by first multiplying the cumulative high school GPA by 30 and then adding the ACT composite score. Applicants under 21 years of age, who meet all

other requirements including high school graduation and the mandated curriculum, and whose Admission Index is 95 or greater [(30 x GPA) + ACT ≥ 95], will be guaranteed admission. Applicants who do not meet the Admission Index requirement but provide an ACT composite score of 26 or greater or a cumulative GPA of 3.0 or greater will also be admitted. Those applicants whose Admission Index is at least 80 but less than 95 will be considered for acceptance by the Admission Committee. For further information contact the Office of Admissions.

Applicants with *special talents or circumstances* who do not meet requirements for guaranteed admission may be considered. For further information contact the Office of Admissions. Applicants with diagnosed learning disabilities should contact the Director of the Office for Students with Disabilities for further information.

### High School Curriculum Required For Admission

No high school curriculum can assure that a given student will acquire desired learning outcomes; however, the absence of certain components greatly increases the likelihood that the student will not acquire those outcomes and reduces the likelihood that the student will enjoy maximum benefits of a college experience. The justification for colleges' recommending or requiring specific high school units for admission is to reduce the likelihood that a student will be unprepared for effective work in college and to increase maximum benefits a student may enjoy.

Effective the Fall Semester 1989, among the units required for graduation, the following specific high school units must be included in the minimum admissions requirements at all Tennessee State Board of Regents universities and colleges. **Students who do not take one or more of these required courses, where they are available, may not be eligible for admission to the University.**

**ENGLISH (4 units required):** Units in this category must address reading and literature, writing, speaking and listening, and principles concerning the English language. Extensive experience in reading and writing should characterize all courses.

**VISUAL AND/OR PERFORMING ARTS (1 unit required):** Units in this category should include a survey of the arts (visual arts, theater, music, and dance) or active participation in one or more of the arts.

**MATHEMATICS (3 units required):** Units in this category must include Algebra I, Algebra II, and geometry or an advanced course with geometry as a major component. Students are recommended to take a fourth unit in computing, advanced mathematics, or statistics. All college freshmen will benefit by having studied mathematics as seniors.

**NATURAL AND PHYSICAL SCIENCES (2 units required):** Units in this category must include mathematical skills, fundamental concepts, and some laboratory and field work. At least one unit must address detailed knowledge in the more traditional fields of biology, chemistry, or physics and must include a laboratory.

**SOCIAL STUDIES (2 units required):** For students graduating prior to spring 1993, the units in this category may include: history, government, geography, economics, sociology, psychology, or anthropology. For students graduating in the spring 1993 or thereafter, these units must come from the following: modern history, ancient history, world history, world geography, or European history. One unit in American History is also required.

**FOREIGN LANGUAGE (2 units required):** Two units in a single foreign language are required in this category.

These stipulated high school units are not intended to specify what the total high school curriculum should be. Secondary schools seek to meet the needs of various student clienteles, one of which is the college-bound student. The stipulations are, on the other hand, an attempt to make a strategic application of academic competencies. They reflect the bridge from specific desired learning outcomes to a list of required college admission criteria. That list is composed of high school units presumed most likely to result in the required learning outcomes. For the sake of clarity, one unit constitutes one year of high school study of a given subject.

Applicants with subject deficiencies may, with proper institutional approvals, be admitted to the University; however, the deficiencies must be removed during the first 64 semester hours (30 semester hours for transfer students) of college enrollment. College level courses taken to remove unit deficiencies must be completed with a grade of C or better and will be used for elective credit only. Different requirements may be specified for certain groups of applicants: adult students (i.e., students separated from high school graduation by three or more years), GED students who are not high school graduates, and international students. Transfer and re-entry students may be required to remove any deficiencies before regular admission.

### Out-of-State Applicants

Acceptance to the University for out-of-state applicants who meet guaranteed admission standards may be granted on the same basis as for in-state applicants. Acceptance for all other out-of-state applicants is competitive.

Out-of-state applicants who qualify for and participate in the University Honors Program may qualify for a Non-Resident Honors Student Award.

### Early Admission Applicants

Academically outstanding high school juniors who have completed three academic years of high school, accumulating at least 14 units of course work may be considered for early admission if they have the following:

1. A minimum high school cumulative grade point average (GPA) of 3.5 on a 4.00 scale.
2. A minimum ACT composite score of 26 on the ACT or the equivalent on the former ACT.
3. Written recommendations from high school principal and guidance counselor.
4. An interview with U of M faculty/staff committee selecting early admission students.

In addition, they must agree to enroll in freshman English, and, unless successfully completed in high school, courses in American history and economics.

NOTE: Early admission applicants should also check with their high school for specific graduation requirements.

### Transfer Applicants

The University of Memphis welcomes applications from students who have begun college elsewhere. They may transfer to The University of Memphis with any number of units. If they have fifteen (15) or more semester units transferable from a fully accredited college or university, students are evaluated primarily on college-level work. If they have fewer than fifteen (15) transferable units, students are evaluated on a combination of college-level and high school course work, and college entrance examination results.

To qualify for degree-seeking transfer admission, the applicant must request that a transcript from each institution attended be sent directly to the Office of Admissions. Transfer applicants who graduated from high school in 1989 or later may also be subject to the high school curriculum requirements found above in this section of the *Bulletin*. To make this determination, a high school transcript is necessary. Therefore, all transfer applicants whose high school graduation date was in 1989 or later should have a transcript mailed directly from their high school to the Office of Admissions. Concealment of previous college or university attendance may be cause for rejection or cancellation of admission.

Admission may be granted to applicants who have honorable dismissal from the last institution attended and whose cumulative grade point average (GPA) meets the required minimum established by the Tennessee State Board of Regents, as stated below:

| Semester Hours Attempted | Minimum GPA |
|---|---|
| 14.99 or less | No minimum* |
| 15.00-29.99 | 1.40 |
| 30.00-50.99 | 1.70 |
| 51.00-67.99 | 1.90 |
| 68.00 and above | 2.00 |

* Transfer applicants with fewer than 15.00 attempted semester hours must meet the admission requirements for freshman applicants.

Transfer applicants who have been academically dismissed from the last institution they attended *or* do not meet the GPA requirements listed above will not be considered for admission until at least one regular semester (not to include summer sessions) has elapsed. After this period, these applicants must submit a new application (no additional fee required).

If acceptance to the University is granted, the applicant will be admitted on academic probation. Students on probation at their previous school will continue in that academic status.

Transfer applicants who are denied admission should contact the Office of Admissions to discuss the possibilities of attending the University in the future.

### Adult Students

The University of Memphis encourages the enrollment of adult students. In order to facilitate this, the University offers additional support services and alternative admission policies to promote the enrollment of the mature student. The Adult and Commuter Services Office offers childcare during class attendance, tutoring programs, the Adult Student Association and much more.

In addition, adult students generally are not required to provide an entrance examination for admission. They may, however, be expected to complete a placement instrument depending on individual circumstances.

Adult students are those applicants who meet one of the following criteria:

1. at least 24 years of age
2. at least 21 years of age and have been away from school for some time.

For further information, please contact the Adult and Commuter Services Office in room 419, University Center.

### Service Members Opportunity Colleges (ConAP Program)

The University of Memphis is a participant in the Service Members Opportunity Colleges (SOC) partnership. Under this agreement and through the Concurrent Admissions Program (ConAP), people enlisting in the armed forces can be admitted to a college and/or university at the same time as their enlistment. Eligible soldiers can be admitted to college on a full or provisional basis, with enrollment deferred for up to two years after completion of active military service or initial active-duty for training. Enrollment of a student who, subsequent to this agreement, attempts college course work elsewhere is subject to academic performance standards stated in this *Bulletin*. In addition to the concurrent admissions, the last 25-hour residency requirement of the University has been waived for participants. More information can be obtained through the Director of Office of Admissions, The University of Memphis.

### International Students

The University of Memphis believes that the presence of a balanced representation of international students on campus will enrich the educational environment of all students. Therefore, the University is authorized under federal law to enroll non-immigrant, alien students on "F-1" and "J-1" student visas. Applicants must file complete credentials before May 1 for fall admission; September 15 for spring admission; or February 1 for summer admission. Complete credentials include all the documents listed below under "Requirements."

The international application should be completed carefully and returned to the Office of Admissions, The University of Memphis, 229 Administration Building, Memphis, Tennessee, 38152-3370, U.S.A. Applications and fees received after the stated deadlines will be returned.

A non-refundable international application and processing fee of $50.00 (fifty dollars) is required of every international applicant, unless previously paid. A check or money order, made payable to The University of Memphis, must be sent with the application form. Applications received without the fee will be returned.

International applicants should write to the Office of Admissions for information on application procedures, qualifications, and admission to the University. Since there is considerable variation among educational systems throughout the world, international applicants will be selected on a competitive basis, after meeting the minimum standards of admission using examination scores, grade point average, relevance of academic background to intended major field of study and recommendations from the World Education Services. The University often receives more applications than can be approved; therefore, admission cannot be granted to all applicants who meet only the minimum requirements.

All transcripts, test scores, and other credentials must be accompanied by an official English translation of these documents and must be on file in the Office of Admissions by the stated deadlines before the beginning of registration for the intended term of entry.

## Admission Requirements

1. **Educational Background:** Applicants must list on the form provided by the University every school attended, beginning with primary school, to the present, including each primary, secondary, and post secondary institution.
2. **Required Transcripts:** Applicants must arrange for the Office of Admissions to receive official copies of academic records of the applicant's attendance at secondary school, college, university, and professional institutions of learning. These transcripts must be sent directly from the high school or college to The University of Memphis. An exception is made for those who hold the bachelor's degree or its equivalent in that they need not send their secondary school records. Records should list the subjects studied and the grade, mark, or other evidence that each individual subject was completed to the satisfaction of the authorities in charge. If it is impossible for the school to send us an official copy, copies certified by an official at the American Embassy or a known world organization may be acceptable. All records must be in English. Since certificates and records filed for examination are not ordinarily returned, applicants should send certified photostat copies if the documents in question cannot be easily replaced.
3. **Required Test of All Applicants:** All applicants whose native language is not English must supply results of the Test of English as a Foreign Language (TOEFL) or its equivalent. TOEFL information may be obtained by writing: TOEFL, Educational Testing Service, Princeton, New Jersey, 08540, U.S.A. All test scores must be sent directly from the testing agency to The University of Memphis.
4. **Freshman Test Required:** Applicants to the first year undergraduate level must submit scores on the Scholastic Aptitude Test (SAT) or the American College Testing Program (ACT). These tests are available only in English. For information on the SAT, applicants may write to College Entrance Examination Board, Box 592, Princeton, New Jersey, 08540, U.S.A. For information on the ACT, applicants may write to American College Testing Program, P.O. Box 414, Iowa City, Iowa, 52243, U.S.A. All test scores must be sent directly from the testing agency to The University of Memphis.
5. **Financial Statement:** U.S. visa regulations require that certification of admission be based on both academic acceptance and satisfactory evidence of adequate funds to meet the expenses involved in the student's program of study. Applicants for an "F-1" student visa must supply, on the form provided by the University, sufficient evidence of financial support for themselves and all members of their families who will accompany them to Memphis. This requires that applicants certify that their intent is to attend the University full time and that no employment will be required.
6. **Health Certificate Required:** Each international student, within 30 days from the first day of classes, must submit a certificate from a licensed U.S. physician or other qualified U.S. medical authority verifying freedom from tuberculosis. Failure to do so shall result in denial of enrollment. In the event that the student either has tuberculosis or has potential tuberculosis requiring medical treatment, continued enrollment will be conditioned upon the determination by a licensed U.S. physician that such enrollment does not present a risk to others and upon the student's compliance with any prescribed medical treatment program.

   In order to enroll, all international students born after January, 1957, must prove that they have been inoculated with the live measles vaccine (MMR) **since January, 1980.** Exceptions are made for students who are pregnant or allergic to the vaccine.
7. All international students must purchase a health insurance policy through the University or provide evidence of government sponsored health insurance before they are allowed to enroll.
8. **English Placement Examination:** All international applicants who are accepted must take an English placement examination, administered by the English Department, before enrollment. Placement in an English class will be determined by the results of this examination. International students should arrange to be on campus approximately one week before the beginning of first day of classes for the proposed term of entry.
9. International students will not normally be allowed to register as transient students (those regularly enrolled and in good standing at another institution who desire to attend The University of Memphis for only a limited period of time). During summer sessions, exceptions may be granted only in cases where a student has an outstanding academic record and unusual circumstances are present.
10. International students who wish to apply for readmission to the University must meet the deadlines stated above.
11. International students must become familiar with the regulations of the Immigration and Naturalization Service and assume responsibility for complying with these regulations.
12. International students should be prepared to attend a four- to five-day mandatory orientation prior to the first day of class.

## Combination Senior

An undergraduate student with a total cumulative GPA of at least 3.25, who has filed with his or her graduation analyst a plan for completing the bachelor's degree within two semesters, with the approval of the college director of graduate studies, may request to enroll concurrently in undergraduate and selected graduate courses. Students may earn up to 12 hours of graduate credit while enrolled as a Combination Senior. Approval to register for graduate credit does not imply approval for admission into a graduate program at the University or that the credit earned will be accepted towards a graduate degree. After the bachelor's degree is awarded, a Combination Senior may be admitted to a graduate degree program. Courses taken for graduate credit may not be used for both the baccalaureate and graduate degrees.

## Former Students (Readmission)

Former undergraduate students who wish to return to the University at the same level as when they previously attended and have missed any academic term excluding summer, must file an application for readmission. This form should be secured, completed, and returned to the Office of Admissions. If the student has enrolled at another institution since last attending The University of Memphis, a transcript must be forwarded to the Office of Admissions. An applicant will receive favorable consideration only if eligible for readmission under all University regulations, including the grade point average (GPA) for transfer students. (NOTE: International students who wish to apply for readmission to the University must meet the deadlines for new admission for international students.)

### Admission as Non-Degree Undergraduates

Applicants who wish to apply in one of the special categories listed below are encouraged to apply by the same deadlines as stated for Regular Undergraduates. While applications may be accepted until the first day of registration for the term for which the student is applying, no guarantee of admission will be made after the deadline has passed. Special category students who have attended other colleges will not have their previous college work evaluated for transfer until they have been approved for admission as regular undergraduates. **An applicant who has applied as a degree-seeking undergraduate and was denied admission must generally wait a fall or spring semester or six months before applying for admission at the non-degree level.**

Those who are admitted as non-degree students are not required to have an advisor. However, if non-degree students desire an advisor, they are assigned to the Academic Counseling Unit for advising. Non-degree undergraduate students may not take more than 18 semester hours of work in a single term nor may they earn more than 24 semester hours total. This limit may be extended if there has been enrollment at another institution since last attending The University of Memphis.

## NON-DEGREE APPLICANTS

An applicant who wishes to enter the University, and who is not presently pursuing a degree, may do so by applying for admission at this level and meeting one of the three conditions listed below:

### Applicants with College Degree

An applicant who has (1) earned a baccalaureate degree from an accredited institution, (2) who desires to take only a limited number of undergraduate courses, and (3) who is not presently working toward a degree at The University of Memphis may be admitted in this category.

### Applicants with Previous College Attendance but No Degree

A student currently or previously enrolled in any accredited college or university may be admitted in this category.

NOTE: Transient students (those regularly enrolled and in good standing at another institution who desire to attend The University of Memphis for only a limited period of time) should apply at the non-degree level.

#### Applicants with No Previous College Attendance

An applicant who has never attended another college or university may be admitted in this category by meeting the following conditions:

1. provide proof of high school graduation or the equivalent OR
2. be at least 21 years of age or provide proof that the high school class of which he or she was a member graduated at least three years ago.
3. Applicants who are offered admission with ACT composite, English, or math scores less than 19 who wish to take an English or a mathematics course will be required to take a placement examination prior to enrollment. Based on the results of this assessment, these applicants may be required to successfully complete remedial or developmental courses prior to enrolling in degree credit courses.

NOTE: Those applicants under 21 who complete their high school work during the calendar year in which they seek admission will not be considered in the non-degree category. These applicants must apply as regular undergraduate freshmen.

All non-degree students may, at any time within the stated deadlines, apply to the Office of Admissions for reclassification as degree-seeking students, effective at the beginning of the next fall or spring semester. Admission procedures and requirements are the same as those for degree-seeking undergraduate applicants with the following clarifications:

1. An acceptable entrance examination score or the equivalent may be required for students wishing to have their level changed to degree-seeking undergraduate status. Applicants who do not meet one of the criteria outlined in the Adult Students section may choose one of the following to complete this requirement:

   A. Submitting an acceptable ACT or SAT score.

   OR

   B. Earn at The University of Memphis a cumulative GPA of 2.00 or greater that includes 12 hours or more exclusive of physical activity courses.

   NOTE: Courses defined as Transitional Academic Studies (DSP) may not be used in satisfying the 2.00 requirement.
2. The high school graduation requirement may be satisfied by any of the methods listed in the regular undergraduate freshman section of this *Bulletin*.

After students are admitted as regular undergraduates, any credit that may have been earned as non-degree-seeking students may apply toward degree programs in the college from which a degree is sought as outlined in this *Bulletin*.

### Concurrent Enrollment

Outstanding high school students who have completed the junior year may be admitted and register for one college course per term of enrollment concurrently during their senior year provided they supply evidence of the following:

1. A minimum high school cumulative grade point average (GPA) of 3.20 on a 4.00 scale.
2. An ACT composite score of 22 or above.
3. A recommendation from the applicant's high school principal or guidance counselor.
4. The course concurrently enrolled students register for must be taken outside of their established school day.

NOTE: Departments may establish additional criteria for their courses.

### Admission as Audit-Only Undergraduate

Persons who are not enrolled for credit courses may register for audit courses with the approval of the Office of Admissions and the appropriate department chair. These students must have the equivalent of high school graduation or be at least 18 years of age. Clearance will be for one term only. Subsequent enrollment will require an application for readmission. Tennessee residents who have a permanent and total disability, which totally incapacitates them from working at an income producing occupation, may audit courses at The University of

Memphis without paying tuition charges, maintenance fees, student activity fees, or registration fees. Admission to audit will be limited on an individual classroom basis according to space availability. An application fee of $15.00 is required.

### NEW STUDENT ORIENTATION, ADVISING AND REGISTRATION

The academic year consists of two semesters and a summer term. The fall semester begins in late August or early September and ending in December; the spring semester begins in January and ends in May; and the summer session held between the end of the spring semester and the beginning of the fall semester.

The New Student Orientation program, which is required for all first time degree-seeking students, is held during the summer for new freshmen and transfer students and in December for new spring semester students. Orientation is designed to acquaint new students with registration procedures, University regulations, college life, and student activities and services.

During Orientation, students meet with an academic advisor, plan their course schedule, and register for classes. **Even though advisors help students select the appropriate courses, this does not relieve students of their responsibility to study the *Undergraduate Bulletin* and fulfill all of the requirements for their specific degree program.** (Note: Before students attain senior standing, they should consult with the college level advisor or graduation analyst of the college regarding fulfillment of requirements for their degree.)

All first-time freshman whose ACT composite score, mathematics subscore, and/or English subscore used for admission to the University is less than 19 must take a placement test before registration. Students must complete any required Transitional Academic Studies (DSP) courses before enrolling in college-level courses in related areas.

Credit is not allowed in any course for which students are not officially registered. Students must withdraw from all courses prior to the first day of classes for the session to avoid financial responsibility for fees.

# 2. Student Aid

The Student Financial Aid Office administers federal, state, and institutional aid programs in order to provide financial aid to qualified students. The programs of financial aid include Scholarships, Grants, Loans, and Student Employment. With the exception of grants, which are always need-based, each of these financial aid programs can be either need-based or non-need based. All need-based programs are based on an assessment of an Expected Family Contribution using family income and asset information provided by the completion of the Free Application for Federal Student Aid (FAFSA) by the student and/or parent. Students applying for financial aid programs that require the FAFSA must be U.S. Citizens or permanent residents, must be admitted as degree-seeking students, and if seeking a second bachelor's degree, have declared a major.

The FAFSA is also required as the application for federal student non-need based loans. The FAFSA is not required for Federal PLUS Loans (for parents of dependent students), non-federal student loans, scholarships, and non-federal student employment.

The University of Memphis priority date for filling the FAFSA for a fall semester is March 1. For a spring semester, the priority date for filing is October 1. The student must also submit any other required documents in order to complete his/her application prior to being awarded. Students are notified of any other required documents after the Student Financial Aid Office receives the FAFSA results.

## Scholarships

The University awards several hundred academic scholarships each year in varying amounts. Scholarship award amounts, however, are based on the cost of in-state enrollment fees. Scholastic achievement, leadership qualities, and need are factors utilized in evaluating applicants for some awards.

Scholarships are awarded for the academic year and are not available for summer school.

THE FEDERAL TAX REFORM ACT OF 1986 significantly changed the tax status of scholarships, fellowships and grants received from the University. Prior to the Act, they generally were not subject to income tax. Since then, scholarship, fellowship and grant amounts exceeding tuition, fees, course-related books, supplies and equipment have become taxable.

## Distinguished Scholarship Programs

Distinguished scholarships are awarded annually to entering freshmen with outstanding scholastic records based on information submitted on the Undergraduate Admission Application and supporting documents; a separate scholarship application is not required. Scholarships are awarded based on a combination of ACT/SAT scores and cumulative high school grade point average. These scholarships are four-year, renewable scholarships requiring full-time attendance. **To be guaranteed a scholarship, you must meet the appropriate criteria as outlined below, and be accepted for admission to the University by March 1.** The Free Application for Federal Student Aid (FAFSA) is not required to be considered for these scholarship programs. Please contact the Undergraduate Scholarship Office, Wilder Tower, room 107, or call (901) 678-3213 with any questions.

All National Merit and National Achievement Semi-Finalists will receive $1,000 per year in addition to any academic scholarship they are awarded.

#### The Cecil C. Humphreys Merit Scholarship

The Cecil C. Humphreys Merit Scholarship is awarded to National Merit/National Achievement finalists who indicate The University of Memphis as their first choice university with the National Merit Scholarship Corporation. This award provides in-state enrollment fees, a campus housing allowance, an annual book allowance, a meal allowance and the yearly National Merit stipend. For renewal, recipients must maintain a minimum 3.0 cumulative GPA for the first year and a minimum 3.25 cumulative GPA every semester thereafter and complete 10 service hours per year. Award adjusted if living off campus.

#### The Cecil C. Humphreys Presidential Scholarship

The Cecil C. Humphreys Presidential Scholarship requires a minimum 32 ACT (1410 SAT) and a minimum 3.5 cumulative high school GPA. The award provides in-state enrollment fees, a campus housing allowance and a $400 per year stipend. For renewal, recipients must maintain a minimum 3.0 cumulative GPA for the first year and a minimum 3.25 cumulative GPA every semester thereafter and complete 10 service hours per year. Award adjusted if living off campus.

**The Cecil C. Humphreys Herff Engineering Scholarship**

The Herff Engineering Scholarship is awarded to students who major in Engineering and requires a minimum ACT of 30 (1320 SAT) and a minimum 3.5 cumulative GPA. The award provides for in-state enrollment fees, a campus housing allowance and a $400 per year stipend. For renewal, recipients must maintain a minimum 3.0 cumulative GPA for the first year and a minimum 3.25 cumulative GPA every semester thereafter and complete 10 service hours per year. Award adjusted if living off campus. Humphreys Herff recipients who change their major to another college within the University will be removed from the Herff Scholarship and placed on the Academic Excellence Scholarship.

**The Academic Excellence Scholarship**

The Academic Excellence Scholarship requires a minimum 30 ACT (1320 SAT) and a minimum 3.0 cumulative high school GPA. The award provides for in-state enrollment fees and a $1000 per year stipend. For renewal, recipients must maintain a minimum 3.0 cumulative GPA for the first year and a minimum 3.25 cumulative GPA every semester thereafter and complete 20 service hours per year.

**The Early Scholars Scholarship**

The Early Scholars Scholarship requires a minimum 27 ACT (1210 SAT) and a minimum 3.0 cumulative high school GPA. The award provides for in-state enrollment fees and a $400 per year stipend. For renewal, recipients must maintain a minimum 3.0 cumulative GPA and complete 30 service hours per year.

**The Distinguished African American Scholars**

The Distinguished African American Scholars for African American students requires a minimum 26 ACT (1170 SAT) and a minimum 3.0 cumulative high school GPA. The award provides for in-state enrollment fees and a $900 per year stipend. For renewal, recipients must maintain a minimum 3.0 cumulative GPA and complete 30 service hours per year.

## General Scholarship Programs

Scholarships that fall within the General Scholarship Programs are awarded annually to entering freshmen based on information submitted on the Undergraduate Admission Application and supporting documents; a separate scholarship application is not required. Scholarships are awarded based on a combination of ACT/SAT score and cumulative high school GPA.

These scholarships are four-year, renewable scholarships requiring full-time attendance. To be guaranteed a scholarship, you must meet the appropriate criteria as outlined below, and be accepted for admission to the University by March 1. The Free Application for Federal Student Aid (FAFSA) is not required to be considered for these scholarship programs. Please contact the Undergraduate Scholarship Office, *http://www.enrollment.memphis.edu/FinancialAid/aidprog1.html#schol* with any questions.

**The U of M Regents Scholarship**

The U of M Regents Scholarship requires a 26 ACT (1170 SAT) and a minimum 3.0 cumulative high school GPA, or a 25 ACT (1130 SAT) and a minimum 3.5 high school GPA. The award provides in-state enrollment fees. For renewal, recipients must maintain a minimum 2.8 cumulative GPA and complete 30 service hours per semester.

**The African American Scholars**

The African American Scholars for African American students requires a 23 ACT (1060 SAT) and a minimum 3.0 cumulative high school GPA. The award provides in-state tuition and a $400 per year stipend. For renewal, recipients must maintain a minimum 2.8 cumulative GPA and complete 30 service hours per semester.

**The University Half Tuition Scholarship**

The University Half Tuition Scholarship requires an ACT of 25 (1130 SAT) and a minimum 3.0 cumulative high school GPA, or an ACT of 23 or 24 (1060 SAT) and a minimum 3.5 cumulative high school GPA. The award provides one-half the cost of in-state enrollment fees. For renewal, recipients must maintain a minimum 2.8 cumulative GPA and complete 15 service hours per semester.

**The African American Enrichment Scholarship**

The African American Enrichment Scholarship provides a $1000 award to African American students with a 21 or 22 ACT (980 SAT) and a minimum 3.5 cumulative high school GPA who have not received other academic scholarships. For renewal, recipients must maintain a minimum 2.5 cumulative GPA and complete 10 service hours per semester.

## Adult and Transfer Scholarships

The scholarships described below require separate scholarship applications available in the Scholarship Office.

**The Adult Scholarship**

The Adult Scholarship requires the applicant to be 24 years of age by August 1st of the application year and also complete the Free Application for Federal Student Aid (FAFSA). Competitively awarded. The award provides in-state enrollment fees and is available to students enrolled with a minimum of 6 credit hours. For renewal, recipients must maintain a 2.5 cumulative GPA and complete 15 service hours (part time) or 30 service hours (full time) per semester.

**The Community College Transfer Scholarship**

The Community College Transfer Scholarship is awarded competitively to students transferring from a Tennessee community college who have earned an Associate's Degree with a minimum 3.5 cumulative GPA. This award requires full time enrollment and provides in-state enrollment fees and a $400 per year stipend. For a one-year renewal, recipients must maintain a 2.8 cumulative GPA and complete 30 service hours per year.

**The Community College Minority Transfer Scholarship**

The Community College Minority Transfer Scholarship is awarded competitively to African American students transferring from a Tennessee community college who have earned an Associate's Degree with a minimum 3.25 cumulative GPA. This award requires full time enrollment and provides in-state enrollment fees and a $400 per year stipend. For a one-year renewal, recipients must maintain a 2.8 cumulative GPA and complete 30 service hours per year.

**The Community College Presidential Scholarship**

The Community College Presidential Scholarship is awarded to the student who has earned an Associate's Degree and is recommended by the president of each of Tennessee's community colleges. The award provides in-state enrollment fees and is renewable for one additional year with maintenance of a 2.8 cumulative GPA.

### The Phi Theta Kappa Scholarship

The Phi Theta Kappa Scholarship is awarded to all incoming Phi Theta members with an Associate's Degree from a community college who are not receiving other academic scholarships. Tennessee state residency is not required for this scholarship. The award is valued at $1000 per academic year. For a one-year renewal, recipients must maintain a 2.8 cumulative GPA and complete 10 service hours per year.

## Other Scholarships

### The Emerging Leaders Scholarship

The Emerging Leaders Scholarship requires a separate application and an ACT of 20 (940 SAT) and a minimum 2.8 cumulative high school GPA, Tennessee residency, and participation in high school extra-curricular activities. This scholarship is competitively awarded, and requires an interview. The award provides in-state enrollment fees and a $400 per year stipend. For renewal, recipients must maintain a 2.25 cumulative GPA for the first year and a 2.5 cumulative GPA each semester thereafter. Application deadline is February 9th.

### The Valedictorian Scholarship

The Valedictorian Scholarship awards the top scholar from each of Tennessee's accredited or State approved high schools. The recipient must rank number one in their class and meet the admission requirements of the University. The award provides in-state enrollment fees and is renewable with a 3.0 cumulative GPA.

## Private University Scholarships

The scholarships described below require an application form that is available in the Scholarship Office. Most private scholarships stipulate that the applicant must be an entering freshman, but a small number may be available to current students.

**THE TAYLOR AND MARY RICHARDSON SCHOLARSHIP** is awarded to entering freshmen who are graduates of Lake County High School in Tiptonville, TN. Applicants must demonstrate academic ability and financial need.

**THE JOHN W. AND MYRTLE P. RICHARDSON SCHOLARSHIP** is awarded to students in the upper quartile of their high school class who show a need for financial assistance. Entering freshmen and/or continuing students are considered for award. Maintenance of a 3.0 cumulative GPA is required for renewal.

**THE R. C. ANDERSON SCHOLARSHIP** is restricted to male students between the ages of 18 and 24 who are incoming freshmen from Benton, Decatur, and Henderson counties in Tennessee. Maintenance of a 2.8 cumulative GPA is required for renewal.

**THE JAMES E. McGEHEE MORTGAGE COMPANY SCHOLARSHIP** is awarded to a Shelby County entering freshman that has demonstrated outstanding academic achievement. Maintenance of a 2.8 cumulative GPA is required for renewal.

**THE UNIVERSITY OF MEMPHIS FACULTY/STAFF SCHOLARSHIP** is awarded to entering freshmen and/or currently enrolled students who are children or spouses of U of M Faculty/Staff with 3 years continuous employment at The U of M. Entering freshmen must have a 20 ACT and a high school GPA of 3.0 or better to be considered. Current students must have been enrolled for two semesters at The U of M with a minimum cumulative GPA of 3.0. Maintenance of a 2.8 cumulative GPA is required for renewal.

**THE LESLIE GRUBER SCHOLARSHIP** is awarded to entering freshmen with a minimum 3.0 cumulative high school GPA and evidence of financial need. Non-renewable.

**THE MEMPHIS HIGH SCHOOL ALUMNI SCHOLARSHIP** is awarded to an entering freshman who is a graduate of a Memphis high school and who demonstrates academic ability. Maintenance of a 2.8 cumulative GPA is required for renewal.

**THE BILLY J. MURPHY SCHOLARSHIP** is awarded to a Memphis area student who has demonstrated financial need and shows scholastic ability. Established in 1974 to honor former U of M Athletic Director, Billy J. Murphy for his long service to the school.

**THE ABE WALDAUER MEMORIAL SCHOLARSHIP** is awarded to entering freshmen that are residents of Shelby County. Applicant must demonstrate academic ability, financial need, and must be employed between 24 and 27 hours weekly to be considered for this scholarship. Non-renewable.

**THE JAMES McCLENDON HIGHLAND 100 SCHOLARSHIP** is awarded to an entering freshman that is a graduate of a Memphis area high school and has demonstrated financial need and academic potential. Non-renewable.

**THE HENRY M. AND LENA MEYER KAHN SCHOLARSHIP** is awarded to students with and ACT of 21 or above and a high school minimum cumulative GPA of 3.0. Preference is given to students of the Jewish faith. Maintenance of 2.8 cumulative GPA is required for renewal.

**THE JOHN WILCOX SCHOLARSHIP** is awarded to one freshman, one sophomore, one junior and one senior at The University of Memphis. Maintenance of 2.5 cumulative GPA is required for renewal.

**THE DR. MARTIN LUTHER KING, JR. SCHOLARSHIP** is awarded to current University of Memphis students based on academic merit, leadership in social justice and human rights activities in the community and at the U of M. Minimum cumulative GPA of 2.75 is required. Non-renewable.

**THE EXCHANGE CLUB OF EAST MEMPHIS/ALLEN SHACKELFORD SCHOLARSHIP** is awarded to a hearing impaired or deaf student enrolled full time at The University of Memphis. If no qualified applicant is chosen the award can be given to a student training to be a teacher of the deaf.

**THE LUTHER C. McCLELLAN ALUMNI CHAPTER MINORITY SCHOLARSHIP** is awarded to a full-time student with a minimum cumulative GPA of 2.5. Applicant must submit letter of recommendation. Financial need and participation in extracurricular activities may be considered. African American students may be given special consideration. Non-renewable.

**THE FISHER-MAHER SCHOLARSHIP** is awarded to a current student with a minimum cumulative GPA of 2.8. Financial need is considered in the selection process. Students may be part time.

**THE FURR-BOWMEN SCHOLARSHIP** is awarded to an entering freshman that meets The University of Memphis admission requirements. Financial need may be considered in the selection process. Maintenance of 2.5 cumulative GPA is required for renewal.

**THE JUDGE BERNICE DONALD SCHOLARSHIP** is awarded to an undergraduate sophomore student with a minimum cumulative GPA of 2.8. Applicant must be a US citizen, and financial need may be considered in the selection process. Special consideration may be given to African-American

females. The Rho Gamma Chapter of Zeta Phi Beta Sorority funds the Judge Bernice Donald Scholarship. Non-renewable.

**THE FLORA RAWLS MEMORIAL SCHOLARSHIP** is awarded to entering freshmen and/or current students with financial need. Freshman recipients must demonstrate academic potential and current students must have a minimum cumulative GPA of 3.0 to be considered.

**THE DAVID COLLINS-OMICRON DELTA KAPPA SCHOLARSHIP** is awarded to a voting member of The University of Memphis Omicron Delta Kappa who demonstrates exceptional leadership. Recipient must expect to receive a baccalaureate degree from The University of Memphis during the year of scholarship receipt and must enroll in graduate or professional school at The University of Memphis immediately following graduation.

### The College of Arts and Sciences

**THE BELLE McWILLIAMS SCHOLARSHIP** recipient must be enrolled in the College of Arts and Sciences, demonstrate an above average interest in American history, have diverse extracurricular activities, and demonstrate outstanding academic achievement. The recipient must be a sophomore or above with a minimum 3.0 GPA.

**THE CARROLL BOWMAN SCHOLARSHIP** is awarded to a philosophy major with demonstrated financial need and academic potential.

**THE OPPORTUNITY FOUNDATION PAUL SCHWARTZ SCHOLARSHIP** is awarded to social work majors who are seniors with a minimum 2.5 GPA.

**THE BOTANY SCHOLARSHIP** is awarded to a student studying botany or biology at The University of Memphis.

**THE LOUNSBURY GEOLOGY SCHOLARSHIP** is awarded to sophomores, juniors, and seniors enrolled full-time who have a minimum cumulative GPA of 3.0. The recipients must be majoring in geology, with prefere0nce given to students interested in oil and gas exploration.

**THE DR. RUSSELL A. JONES MEMORIAL SCHOLARSHIP** is awarded to a senior majoring in chemistry, microbiology and molecular cell sciences, or related science discipline. Preference may be given to those students pursuing careers as physicians. Recipients must have and maintain a minimum GPA of 3.0 in his/her major.

**THE DR. PAUL H. SISCO SR. MEMORIAL SCHOLARSHIP** is awarded to full-time students majoring in geography. A minimum GPA of 2.50 is required.

**THE BOB BAKER SCHOLARSHIP** is awarded to a junior or senior majoring in history with a minimum GPA of 3.0. Students with financial need will be given preference.

**THE GOLDYE FEINSTONE SCHOLARSHIP** is awarded to a student majoring in microbiology and molecular cell sciences on the basis of academic and research achievements as well as potential for professional success.

**THE GENERAL HERBERT L. GRILLS MEMORIAL SCHOLARSHIP** is awarded to a student majoring in any discipline in the College of Arts and Sciences. Freshmen with a minimum ACT of 27, and upperclassmen with a minimum GPA of 2.8 are eligible.

**THE JOSEPH NAPOLEON AND NANCY HARRIS MITCHELL SCHOLARSHIPS** are awarded to transfer students who have declared a major in any discipline in the College of Arts and Sciences. Students must have two years of college from a four-year institution or an Associates degree from an accredited community college, as well as a minimum GPA of 3.25.

**THE MARY PETTUS MEMORIAL SCHOLARSHIP** is awarded to a full-time upperclassman majoring in Foreign Languages with a minimum cumulative GPA of 3.0.

**THE R. P. CLARK SCHOLARSHIP** is awarded to an outstanding junior majoring in mathematical sciences. Emphasis for the award is based on academic merit as well as financial need.

**THE MARCUS W. ORR HUMANITIES SCHOLARSHIP,** established by former students and friends of Dr. Orr to honor his outstanding contributions to the University, is awarded annually to a student majoring in one of the humanities.

**THE OMAR E. SMITH SCHOLARSHIP** in biology is awarded to outstanding juniors and seniors majoring in biology with emphasis in ecology. Students should apply during their sophomore year.

**THE PRISCILLA RUSHTON SCHOLARSHIP** is awarded to a full-time biology major who has demonstrated academic achievement, leadership ability, and strong potential for professional success.

**THE EDWARD T. BROWNE SCHOLARSHIP** is awarded to a full-time biology major who has demonstrated academic achievement, leadership ability, and strong potential for professional success.

**THE MILTON ADDINGTON SCHOLARSHIP** is awarded to the top graduating senior on the basis of outstanding achievement in the field of psychology at The University of Memphis.

**THE WILLIAM H. ZUBER SCHOLARSHIP** is awarded to a B.S. in Chemistry major who has completed at least 16 hours of chemistry course credit.

**THE J.C. WILLIAMS MEMORIAL SCHOLARSHIP** is awarded to a B.S. in Chemistry major who has completed at least 16 hours of chemistry course credit.

**THE KALTENBORNS MATHEMATICS SCHOLARSHIP** is awarded to an undergraduate majoring in mathematical sciences with a minimum 3.0 GPA. Recipient must complete 15 semester hours of course work, maintaining a 3.5 GPA in all math courses.

**THE JOHN MALMO ADVERTISING, INC. SCHOLARSHIP** is awarded to English and marketing students who desire to pursue careers in advertising or public relations. Financial need is considered. Recipients must be U.S. citizens.

**ELIZABETH PHILLIPS SCHOLARSHIP** is awarded to a junior or senior African-American English major with a minimum GPA of 2.5.

**ALBERT H. WOOLLETT SCHOLARSHIP** is awarded to a student majoring in Physics. Renewable if student maintains a GPA of 3.0. Financial need may also be considered.

**DR. NASEEB SHAHEEN SCHOLARSHIP** is awarded to a sophomore, junior, or senior with a minimum GPA of 2.5 who is majoring in Chemistry, Physics, or Mathematics with plans to teach at the high school level. Recipient must be a Tennessee resident.

### The Fogelman College of Business and Economics

**THE THOMAS Y. OWEN SCHOLARSHIP** is awarded to an accounting major demonstrating both financial need and outstanding academic achievement. A minimum cumulative GPA of 3.00 must be maintained. U.S. residency is required.

**THE ETHEL LEWIS SCHOLARSHIP** is sponsored by The University Career Associates of The University of Memphis. The scholarship is available to a junior or senior student majoring in office administration or preparing for a career as a business teacher. The recipient must be a resident of Tennessee

for at least the two previous semesters and must have a cumulative GPA of 3.0.

**THE DR. R. W. JENNINGS SCHOLARSHIP**, a memorial to a former U of M faculty member, provides financial assistance to students in office administration. The recipient must have a minimum GPA of 3.0 and a minimum ACT score of 18 and must be a resident of Memphis or Shelby County and a graduate of a Memphis or Shelby County high school. Financial need may be a consideration.

**THE JOHN ELKINGTON SCHOLARSHIP** in land use development is awarded to a junior student with a minimum GPA of 3.25 majoring in real estate or an allied discipline. Preference is given to a student with a career interest in the land use development field.

**THE RISK AND INSURANCE MANAGEMENT SOCIETY SCHOLARSHIP** is awarded to students classified as at least juniors. Recipients must have a minimum cumulative GPA of 2.60 and a major in risk management or insurance management.

**THE MEMPHIS BOARD OF REALTORS/MARK SOWARDS MEMORIAL SCHOLARSHIP** is awarded to students who are majoring in real estate or an allied discipline. A minimum cumulative GPA of 2.50 is required.

**SHELBY GROUP INTERNATIONAL ENDOWED SCHOLARSHIP FUND** is awarded to a full-time student majoring in business with a minimum of 3.0 GPA. Freshmen with a 3.5 GPA from high school are eligible.

**THE S. L. KOPALD SCHOLARSHIP** is awarded to students who are graduates of a Memphis City or Shelby County high school. Incoming freshmen must have a minimum ACT score of 26. The recipient must be majoring in marketing, and must maintain a minimum GPA of 3.00.

**THE ELEANOR O'NEILL SCHOLARSHIP** is awarded to students majoring in advertising, public relations or journalism. Academic merit is considered. The recipient must be a full-time student and maintain a minimum cumulative GPA of 2.80.

**FOGELMAN COLLEGE OF BUSINESS AND ECONOMICS ALUMNI SCHOLARSHIP** awarded to a junior or senior business major with a 3.0 GPA.

**THE E. I. CRAWFORD/DELTA SIGMA PI SCHOLARSHIP** is awarded to a full-time student in good standing in the Fogelman College of Business and Economics with a minimum cumulative 2.25 GPA. The recipient must be nominated by the Gamma Zeta Chapter of the Delta Sigma Pi Fraternity and is selected by a committee.

**THE SHELTON AND BRUCENE HARRISON SCHOLARSHIP** is awarded to entering freshmen as well as currently enrolled students majoring in either marketing or management. Entering freshmen must have been in the upper third of their high school class. All recipients must maintain a minimum cumulative GPA of 3.0. Preference shall be given to students in need of financial assistance.

**WATKINS, AND UIBERALL ACCOUNTING SCHOLARSHIP AWARD** is awarded to accounting majors enrolled in the School of Accountancy. The students must have a 3.0 minimum GPA both overall and in Accounting courses. Candidates for the scholarship shall have demonstrated academic merit and interpersonal, communication and leadership skills. If there are equally qualified candidates on the above criteria, students demonstrating financial need will have priority.

**ACCOUNTANCY ENRICHMENT FUND SCHOLARSHIP** is awarded to an accounting major who has a 3.0 GPA and who has completed ACCT 2010.

**SCHOOL OF ACCOUNTANCY SCHOLARSHIP** is awarded to a sophomore, junior, or senior student majoring in accounting. The student must have a 3.0 GPA.

**JAMES DOYLE APPLING SCHOLARSHIP** is awarded to a full-time senior majoring in business with at least 95 earned credit hours. The student must demonstrate a financial need and maintain a 3.0 GPA.

**NELL W. BAUGH INTERNATIONAL BUSINESS SCHOLARSHIP** is awarded to a junior or senior majoring in international business. The student must be a U.S. citizen and maintain a 2.75 GPA.

**HERMAN BENSDORF II MEMORIAL SCHOLARSHIP** is awarded to a junior majoring in business. The student must be a graduate of a high school in Shelby County and be a current resident of Shelby County.

**ROY W. AND SUE T. BLACK ENDOWED SCHOLARSHIP FUND** was established by Roy W. Black, a University of Memphis alumnus. The recipient must be an African-American or Hispanic student majoring in business. The student must be a graduate of a high school in Hardeman, Chester, or Decatur county in Tennessee. Preference will be given to freshman.

**JAMES E. HARDWOOD ENDOWED SCHOLARSHIP** is awarded to a junior and a senior majoring in business. The student must be full-time and maintain a minimum 3.0 GPA. A student who receives this scholarship will automatically receive it as a senior if the student continues to meet the requirements.

**INSURANCE WOMEN OF MEMPHIS, INC./CLUDE H. BEAUMONT MEMORIAL SCHOLARSHIP** is awarded to a student majoring in insurance. The recipient must be a junior or senior, maintain a 2.5 GPA and demonstrate financial need.

**KEYSTONE LABORATORIES SCHOLARSHIP** is awarded to an African-American studentmajoring in accounting. The recipient must have a 3.0 GPA and be a U.S. citizen.

**KRAMER ENDOWMENT FUND SCHOLARSHIP** is awarded to a full-time business major. The recipient must be of "non-traditional" age and in need of financial assistance. The student must be a U.S. citizen and a resident of Tennessee. The recipient may receive this award for a maximum of four years provided the student continues to meet the criteria.

**CHARLES J. MYERS AND JEROME B. MYERS SCHOLARSHIP** is awarded to a full-time student with a minimum of sixty credit hours completed and has a minimum GPA of 2.75. The recipient shall exhibit good communication and writing skills. The student shall participate in not more than twenty hours per week in a learning experience at Interactive Solutions, Inc.

**PERKINS RESTAURANT AND BAKERY SCHOLARSHIP** is awarded to a student majoring in hospitality and resort management. The student must be at least a sophomore with a strong academic record. Preference will be given to a student who demonstrates financial need.

**THOMAS R. PRICE/UNION PLANTERS MEMORIAL SCHOLARSHIP** is awarded to a full-time junior or senior majoring in banking, business or a discipline that would promote the forestry industry. The recipient must have a 3.0 GPA, be a resident of Tennessee and a U.S. citizen. Preference is given to an employee or a child of Union Planters Bank employee.

**VERNA T. SHARPES ENDOWED SCHOLARSHIP** is awarded to a full-time female student majoring in business. The student must demonstrate financial need and maintain a 2.5 GPA.

**TENNESSEE MOVERS ASSOCIATION SCHOLARSHIP IN TRANSPORTATION** is awarded to a full-time student majoring is transportation/logistics. The recipient must maintain a 2.5 PGA. Preference will be given to a student that demonstrates financial need.

**JACK WALLACE SCHOLARSHIP, SALES AND MARKETING EXECUTIVES OF MEMPHIS, INC.** is awarded to a junior or senior majoring in sales or marketing. The recipient must have a 3.0 GPA.

**STACEY STECKLER SPRINKLE MEMORIAL SCHOLARSHIP**, a memorial to a former University of Memphis internal auditor, is awarded to either undergraduate or graduate students majoring in accounting. The recipient must have a minimum GPA of 2.5. Financial need is considered. Preference shall be given to students attending night classes.

**TRAMMELL CROW COMPANY SCHOLARSHIP** is awarded to an undergraduate or graduate student with a goal of a career in real estate. Preference will be given to a real estate major that demonstrates financial need. A minimum GPA will be required for the undergraduate student. If all requirements continue to be met, students may be eligible to receive this award for a maximum of two years.

**TIM TREADWELL III/UNION PLANTERS SCHOLARSHIP** is awarded to an outstanding junior or senior who is majoring in property or casualty insurance, banking, business or closely related subject. The recipient must be a U.S. citizen and a Tennessee resident.

**JOHN TULLY/UNION PLANTERS SCHOLARSHIP** is awarded to a full-time junior or senior majoring in banking or some area in business with a cumulative 3.0 GPA. The student must be a U.S. citizen and Tennessee resident.

**ANDREW M. WRAY III MEMORIAL SCHOLARSHIP** is awarded to a full-time junior or senior enrolled in the College of Business and Economics with an interest in Financial Planning and have a 3.0 minimum GPA overall. The recipient must be a U.S. citizen.

**GOLDSMITH DEPARTMENT STORE SCHOLARSHIP** is awarded to a student majoring in business with an ACT of 28 and a high school GPA of 3.0. Special consideration is given to applicants from Shelby County, West Tennessee and other areas served by Goldsmith's Department Stores. Renewable if recipient maintains a 3.0 GPA and is enrolled full-time in the Fogelman College of Business and Economics.

### The College of Communication and Fine Arts

(Awarding of scholarships, in several cases, is contingent upon donor funding)

**THE VARIETY CLUB-ROBERT S. JOHNSON SCHOLARSHIP** was endowed in 1974 to honor the late noted writer for the Memphis Press Scimitar. A scholarship is given to a junior or senior majoring in Journalism who is seeking a career in some phase of that profession. Both financial need and scholarship are factors in the selection of the recipient. The recipient must be a graduate of a Memphis area high school.

**THE JOHN PAUL JONES JOURNALISM SCHOLARSHIP** provides a scholarship in Journalism to a minority student of academic merit in financial need.

**JOURNALISM ALUMNI SCHOLARSHIPS** are awarded to undergraduates and graduate students majoring in Journalism.

**FRANK AHLGREN SCHOLARSHIP** is awarded to a news editorial Journalism major.

**MEMPHIS GRIDIRON SHOW INC. SCHOLARSHIPS** are awarded to undergraduate students at The University of Memphis who have an interest in Music, Journalism or Communication

**ISAAC HAYES EVENING OF SOUL SCHOLARSHIPS** are awarded to students majoring in Theatre and Dance on the basis of financial need and who have demonstrated competence in theatre arts, with special emphasis placed on African-American theatre.

**THE ETHEL T. MAXWELL VOICE SCHOLARSHIP** is given to a voice major in the Applied Music degree program, Bachelor of Music. Incoming freshmen must be in the upper quartile of their high school class and have a demonstrated voice talent.

**THE HERBERT HERMANN MEMORIAL PIANO SCHOLARSHIP** is awarded to a pianist with at least a 20 ACT score or a 3.0 GPA. Auditions for jury board exams will be considered. The scholarship selection is coordinated by the Rudi E. Scheidt School of Music piano faculty and the Scholarship Office.

**THE BAND ALUMNI SCHOLARSHIP FUND** is awarded by the Board of Directors of the Band Alumni Chapter from candidates recommended by the band faculty. The student must be a Music major with a minimum GPA of 2.50.

**MARCHING BAND SCHOLARSHIPS** are awarded to students to participate in The University Marching Band. These awards are based on audition, band needs and previous marching band experience, regardless of academic major. Application and audition schedules are available in the School of Music office and band office. Scholarships are renewable with satisfactory performance.

**THEATRE AND DANCE SCHOLARSHIPS** are awarded to students majoring in Theatre and Dance on the basis of need and promising talent.

**THE ELBA GANDY MEMORIAL MUSIC SCHOLARSHIP** is awarded to a student studying music at The University of Memphis.

**THE BILLY M. JONES SCHOLARSHIP** is awarded to a student studying and/or working in an area that relates to community relations. This would qualify any undergraduate student studying in marketing, commercial art or any discipline within the College of Communication and Fine Arts.

**THE PRESSER AWARD** is awarded to a junior majoring in Music. Award is given at the beginning of student's senior year.

**THE CLEMENT SANTI MEMORIAL MUSIC SCHOLARSHIP** is awarded to a student majoring in Music. The recipient is selected by a committee.

**THE CLEMENT SANTI MEMORIAL THEATRE SCHOLARSHIP** is awarded to a full-time student majoring in Dramatic Arts. The recipient is selected by a committee.

**THE SANTI FAMILY LEGACY SCHOLARSHIP** is awarded to students pursuing a degree majoring in music with a concentration in performance in the area of voice with preference given to student participating in opera. In order to receive this scholarship, recipients must have a minimum ACT score of 23, live in the Mid-South region, and be proven leaders in their community. Freshmen recipients may receive this award for a maximum of four consecutive years of all criteria continue to be met. Scholarship recipients shall be selected by a committee within the College of Communication and Fine Arts.

**MILLS MORRIS OFFICE FURNITURE DESIGN SCHOLARSHIP** is awarded to a junior or senior enrolled at The University of Memphis and pursuing a degree in the field of design. Recipients must have a minimum GPA of 3.0 and be a

Mid-South area resident (TN, AR, MS). Priority will be given to students who demonstrate a need for financial assistance.

**THE SPECIAL MUSIC SCHOLARSHIP** is awarded to an undergraduate Music major at The University of Memphis on the basis of merit.

**VAN W. WALTON MEMORIAL SCHOLARSHIP** is awarded to students in Architectural Technology. The recipient must be a junior or senior with a minimum GPA of 3.0.

**THE WREG-TV / U of M BAND DAY SCHOLARSHIP** is awarded annually to a student pursuing an undergraduate degree in Music.

**THE KEITH KENNEDY SCHOLARSHIP** may be awarded annually to majors in Theatre and Dance on the basis of talent and theatrical achievement.

**THE DONALD AND MARY VAUGHN ART SCHOLARSHIP** provides a scholarship in art to a freshman of academic merit in academic need.

**RICHARD R. RANTA/WREG-TV SCHOLARSHIP** is to be awarded to an incoming student majoring in Communication. The recipient must have a cumulative 3.0 GPA.

**COLLEGE OF COMMUNICATION AND FINE ARTS ENRICHMENT FUND SCHOLARSHIPS AND AWARDS** may be given to students majoring in a discipline within the College of Communication and Fine Arts. Recipients must have a minimum 2.5 GPA.

**THE ART DIRECTORS CLUB OF MEMPHIS SCHOLARSHIP** is awarded annually to an outstanding Art major with a concentration in Graphic Design and a minimum GPA of 3.0. Selection is based on portfolio review.

**THE DANA D. JOHNSON ART SCHOLARSHIP** is awarded annually to an outstanding sophomore, junior, or senior majoring in Art with a concentration in Fine Arts, Art History, or Art Education. A minimum cumulative GPA of 3.0 is required, and preference is given to a student with exceptional portfolio work if recipient is majoring in studio art.

**THE FRANCES FALLS AUSTIN SCHOLARSHIP** is awarded to an incoming freshman pursuing an undergraduate degree in art. Preference is given to a student with exceptional portfolio work.

**THE MARY MARGARET ROSS ART ALUMNI SCHOLARSHIP** is awarded annually by the Art Alumni Chapter to an outstanding Art major with a minimum cumulative GPA of 3.0.

**THE INTERIOR DESIGN ALUMNI SCHOLARSHIP** is awarded annually by the Interior Design alumni to an outstanding junior or senior Interior Design major with a minimum cumulative GPA of 3.0.

**THE MEMPHIS RADIO GROUP KIX-106/SOUL CLASSIC 103.5/STAR 98/SMOOTH JAZZ 98.9/WHZN RADIO SCHOLARSHIP** is awarded to students majoring in Communication, with a concentration in broadcasting, who have a 3.0 GPA or are in the top 25% of their high school graduating class. Recipients must maintain full-time status.

**TALENT BASED SCHOLARSHIPS IN VISUAL ARTS** are awarded annually to incoming freshmen pursuing degrees in Art. Preference is given to students with exceptional talent and potential; portfolio presentation, artistic background, personal character, and intelligence and scholarship. Applicants must complete a standard departmental scholarship form, and will be notified of dates for portfolio presentation (usually in the late fall of a student's senior high school year, but continuing until all scholarships are awarded). These scholarships are renewable for four years. Recipients must maintain full-time status, follow the recommended sequence of Art courses, and maintain a 2.8 GPA.

**ELEANOR B. O'NEILL SCHOLARSHIP** is awarded to students majoring in Journalism with an emphasis in advertising or public relations.

**THE ELVIS PRESLEY SCHOLARSHIP** is given to deserving students majoring in Communication or Music. Students must have a 2.5 GPA.

**TALENT BASED SCHOLARSHIPS IN MUSIC** are awarded annually to students entering the Rudi E. Scheidt School of Music who demonstrate outstanding musical talent through audition. Applicants must complete an application and schedule an audition. They will be notified of subsequent audition dates. Recipients may renew the scholarship with satisfactory musical and scholastic progress.

**TALENT BASED SCHOLARSHIPS IN THEATRE AND DANCE** are awarded annually to students entering The University of Memphis Theatre and Dance Department based upon theatrical talent and potential; artistic background; personal character; and intelligence and scholarship. Applicants must complete a standard departmental scholarship application and selected finalists will be notified of dates for audition or portfolio presentation. Recipients must maintain full-time status and a 2.7 GPA.

**EMERSON A. ALBURTY AWARDS** may be awarded to students who have demonstrated excellence in an area of communication and fine arts at their present high school or college and who will be a full-time major in the College of Communication and Fine Arts. Recipients must have and maintain a 3.0 GPA or its equivalent. Scholarship recipients are to be selected by the dean of the college and representatives of departments within the college.

**MEMPHIS-GERMANTOWN ART LEAGUE AWARD** is awarded to a student who demonstrated exceptional artistic abilities in any discipline within the Art Department.

**KATHY KRIEGER AWARD** is awarded to a student majoring in Communication with a concentration in Broadcasting and Electronic Media who has demonstrated academic merit, involvement in programs, and involvement with WUMR Radio Station.

**JOE AND LILA NORTON JOURNALISM SCHOLARSHIP** is awarded to a junior or senior majoring in Journalism.

**THE ELIZABETH AND HAROLD ROBINSON SCHOLARSHIP** is awarded to full-time undergraduate students majoring in a discipline within the College of Communication and Fine Arts with a minimum GPA of 3.0 and a minimum ACT score of 24. Preference may be given to students from the rural Mid-South and financial need may be considered.

**THE SAM PHILLIPS SCHOLARSHIP** is designated for an outstanding Recording Technology major.

**THE CHARLIE RICH SCHOLARSHIP** is awarded to an outstanding Jazz major.

**ROBERT KELLEY MEMORIAL SCHOLARSHIPS** are open to students enrolled in Music Business at the Rudi E. Scheidt School of Music. Recipients are required to have been in the top 20% of their high school graduating class or have a minimum cumulative GPA of 3.0. These scholarships may be renewed for four consecutive years.

**LILY AFSHAR GUITAR SCHOLARSHIP** is open to full time undergraduate or graduate students enrolled in the guitar program of the Rudi E. Scheidt School of Music. The recipient must be a talented guitarist with a minimum 3.0 GPA. Non-Tennessee residents and foreign students may be eligible for this scholarship. Preference is given to students who demonstrate extreme financial need.

**JOE D'GEROLAMO MEMORIAL SCHOLARSHIP** is open to undergraduate and graduate students enrolled in the Jazz program at the Rudi E. Scheidt School of Music. Recipients must demonstrate financial need as well as academic merit.

### The College of Education

**SARAH P. EATON SCHOLARSHIP** provides scholarships for elementary education students from Crittenden and St. Francis counties in Arkansas.

**THE KIWANIS CLUB OF EAST MEMPHIS MEMORIAL SCHOLARSHIP** is presented to a junior, senior, or graduate student majoring in special education and demonstrating high achievement and need. The recipient must be a Shelby County resident and must have a minimum cumulative GPA of 2.50.

**THE HAROLD W. PERRY SCHOLARSHIP** is awarded to a student majoring in Special Education and Rehabilitation who, in training as a teacher to work with the multi-handicapped, demonstrates high scholastic achievement, experience, and a willingness to work with the handicapped.

**THE COLLEGE OF EDUCATION ALUMNI CHAPTER SCHOLARSHIP** is awarded to an Education major. The applicant must demonstrate need and maintain a 3.0 cumulative GPA. The recipient must be a junior or senior.

**THE ERNEST C. BALL SCHOLARSHIP** is awarded to a student majoring in Education who shows academic ability and financial need.

**THE FRANCES INA STEWART DAVIES SCHOLARSHIP** assists female students pursuing degrees in Family and Consumer Sciences who maintain a minimum GPA of 3.0. Financial need may be considered.

**THE ELLEN DAVIES-RODGERS SCHOLARSHIP** assists students pursuing degrees in Early Childhood Education with emphasis on nursery school, kindergarten, and grades 1, 2 and 3. The recipient must maintain a minimum 3.0 GPA.

**THE BARBARA TUCKMAN MEMORIAL SCHOLARSHIP** is awarded to students enrolled in economics classes. The recipient must maintain an undergraduate minimum cumulative GPA of 3.00 and a graduate minimum cumulative GPA of 3.20 and should be interested in economics education.

**THE ELMA ROANE SCHOLARSHIP** is awarded to a full-time undergraduate with a minimum GPA of 2.75 and/or a graduate student with a minimum GPA of 3.25. Recipients must declare a major in HMSE and have a desire to work with young people through teaching, coaching, sports leadership, or athletic training.

**JACK TALLEY SCHOLARSHIP** is awarded to a junior or senior majoring in Consumer Science and Education with a concentration in home furnishing. Must be a Tennessee resident and have a minimum GPA of 2.5.

**GEORGE W. ETHERIDGE EDUCATION ALUMNI SCHOLARSHIPS** Two George W. Etheridge Education Alumni Scholarships will be awarded annually. One award will be made to an undergraduate teaching candidate who has been admitted to the Teacher Education Program. The second scholarship will be awarded to a junior, senior, or graduate non-teaching major. Applicants must be College of Education majors and present evidence of full-time enrollment, outstanding academic ability, financial need, service and leadership.

**THE MELVIN A. HUMPHREYS PRIZE FOR STUDENT RESEARCH** is awarded to an undergraduate or graduate student pursuing an academic major in the department of Human Movement Sciences and Education, or who has graduated within the previous year. Recipients are selected on the basis of the best, single and/or first authored scholarly work presented or published in an academic or professional forum.

**THE DOCKERY FAROS SCHOLARSHIP** is awarded to an undergraduate student majoring in Exercise and Sport Science, or Sport and Leisure Studies. The recipient must demonstrate an intense desire to pursue a career in coaching. The scholarship is intended for students who are entering their junior or senior years, who have a minimum GPA of 2.5, and who show leadership abilities in the department of Human Movement Sciences and Education.

### The Herff College of Engineering

**THE HERFF ENGINEERING SCHOLARSHIPS** provided annually through the Herbert Herff Estate are available to beginning and currently enrolled students who have demonstrated aptitude for engineering. Applications for these scholarships are submitted through the Herff College of Engineering. Recipients must have a competitive academic record.

**THE CALVIN STREET MEMORIAL SCHOLARSHIP** is awarded to a junior who must have a cumulative GPA of 2.5. The student must be an Engineering Technology major and exhibit academic merit. Scholarship selection is coordinated by the chair of the Engineering Technology Department and Engineering Technology Scholarship Committee.

**THE RAYMOND JOHN AND MYRLIE FENNER COLTHARP MEMORIAL SCHOLARSHIP** is awarded to an undergraduate Engineering Technology student who has at least a 2.0 GPA, and is in financial need. The recipient must be a citizen of the U.S.

**THE RICHARD E. WHITMORE SCHOLARSHIP** is awarded to a Tennessee resident who is a sophomore, junior, or senior Engineering student demonstrating both financial need and academic achievement, preferably majoring in construction, and an active member of the student chapter of AGC.

**TENNESSEE ROAD BUILDERS ASSOCIATION** provides scholarships for students interested in following a transportation career and/or construction related to road building. Selection is made by the Tennessee Road Builders Association. The recipient must have a minimum cumulative GPA of 2.0 and be enrolled in a Civil Engineering curriculum.

**HOYT B. WOOTEN SCHOLARSHIP** is awarded to students in Electrical Engineering. The recipient must be a junior or senior and demonstrate academic ability and financial need.

**THE PICKERING MEMORIAL SCHOLARSHIP** is awarded to students majoring in Civil Engineering. A minimum cumulative GPA of 3.0 is required.

**THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA SCHOLARSHIPS** are awarded to students studying the field of construction within the Civil Engineering department. Selections are made based on academic merit.

**THE LEON D. CASH SCHOLARSHIP** is awarded to juniors and seniors majoring in Electrical Engineering. A minimum cumulative GPA of 2.50 is required.

**THE JOE RUTHERFORD MEMORIAL SCHOLARSHIP** is awarded to an undergraduate student majoring in Civil Engineering with a 3.0 GPA. The recipient must be a U.S. citizen and a resident of Shelby County.

**THE CLARENCE AND MAE WEISS ENGINEERING SCHOLARSHIP** is awarded to a student majoring in Engineering. Preference may be given to Chemical Engineering students should the major be established at The University of Memphis. The scholarship may be renewed by the college.

**ENGINEERING SCHOLARS SCHOLARSHIP** is awarded to an Engineering student selected by the Dean.

**PAUL Y. ISBELL MEMORIAL SCHOLARSHIPS** are awarded to Engineering Technology students majoring in manufacturing technology.

**MAXWELL F. MCDADE, SR. MEMORIAL SCHOLARSHIP** is awarded to students majoring in Civil Engineering.

**DON FARLEY MEMORIAL ENDOWMENT FUND SCHOLARSHIP** is awarded to a Civil Engineering student who demonstrates academic merit and financial need.

**THE BODINE SCHOLARSHIP** is awarded to juniors or seniors in Electrical Engineering.

**SHELBY-SKIPWITH SCHOLARSHIP** is awarded to a student in Mechanical Engineering.

### Loewenberg School of Nursing

**THE SHARON L. HANSARD MEMORIAL SCHOLARSHIP** is awarded to a student enrolled in U of M's School of Nursing. The applicant must be of high moral character and dedicated to service of others, possess academic ability, and have a need for financial assistance to attend U of M.

**THE NURSING ALUMNI SCHOLARSHIP** is designed to assist deserving students in pursuing a Nursing career. The applicant must maintain a 3.0 GPA or better.

**THE ALLENE FARRIS MEMORIAL SCHOLARSHIP** is awarded to Dyer Country Nursing students based on academic merit.

**REGINA MONTESI MEMORIAL SCHOLARSHIP** is awarded to a registered nurse attending The University of Memphis to fulfill prerequisites for a B.S. in Nursing. The student must be a U.S. citizen, have a minimum cumulative 2.5 GPA, and possess academic ability.

**WILLIAM A. AND RUTH F. LOEWENBERG SCHOLARSHIP** is designed to assist students in pursuing a Nursing career. The student must be a U.S. citizen, have a minimum 2.5 GPA and show financial need.

**SAINT FRANCIS HOSPITAL AUXILIARY ENDOWED SCHOLARSHIP** is awarded to a full time junior nursing student with a minimum cumulative GPA of 3.00.

**TENNESSEE NURSES' ASSOCIATION SCHOLARSHIP** is presented to a last semester Nursing student who is a resident of District 1, which includes Shelby and Fayette Counties. The student must be in good standing academically. Members of TNA and TSNA are given preference.

**THE LETTIE PATE WHITEHEAD FOUNDATION SCHOLARSHIPS** are awarded to Nursing students who possess academic ability, high moral character, and financial need. Applicants must be U.S. citizens.

**THE NATIONAL HEALTHCARE SCHOLARS FOUNDATION SCHOLARSHIP** is awarded to minority students pursuing a baccalaureate degree in nursing who have a financial need and are in good academic standing.

### University College

**THE E. A. HAMILTON SCHOLARSHIP** provides financial assistance to students who are firefighters or dependents of firefighters.

**THE UNIVERSITY COLLEGE ALUMNI CHAPTER SCHOLARSHIPS** are awarded to juniors or seniors enrolled in the University College, based upon financial need. A minimum GPA of 2.50 is required.

### Special Scholarships

**AFROTC 2, 3, AND 4 YEAR COLLEGE SCHOLARSHIPS** cover full tuition, laboratory fees, reimbursement for textbooks and provide a progressive nontaxable $250 to $400 per month subsistence allowance for those enrolled in the Aerospace Studies program. High school applicants must have a minimum 2.5 GPA on a 4.0 scale, and a minimum ACT composite score of 24 (1000 SAT). The University of Memphis students may compete for 2 or 3 year full-tuition scholarships based on their cumulative GPA in all college work attempted. GPA requirements vary according to academic major.

**AFROTC PROFESSIONAL OFFICER COURSE INCENTIVE SCHOLARSHIP** is available to ANY contract cadet enrolled in the Professional Officer Course who earned a minimum of 2.35 GPA for the most recent term completed. This scholarship pays $1500 per semester toward tuition and $225 per semester for books. Students also receive a nontaxable $350 to $400 per month subsistence allowance. Contact AFROTC for information on how to join the Professional Officer Course and become eligible for this scholarship.

**AFROTC EXPRESS SCHOLARSHIP** is designed for outstanding minority and non-minority University students pursuing degrees in areas critical to the Air Force. Students must have a minimum college GPA of 2.65 to apply. Qualified minority students may apply regardless of academic major; non-minority students should contact the department for academic major requirements. Scholarships are available for 2 or 3 years, and cover full tuition, books and fees. Students also receive a nontaxable $300 to $400 per month subsistence allowance.

**ARMY ROTC SCHOLARSHIPS** are 4-, 3-, and 2-year scholarships for students who desire to serve in the U.S. Army as officers. Offered by the U.S. Army, these scholarships pay tuition, provide an allowance for books and incidental fees, and pay up to $1,500 a year for subsistence.

**ARMY ROTC MINORITY SUPPLEMENTAL SCHOLARSHIPS** are available to minority students attending The University of Memphis on an Army ROTC scholarship including Black, Oriental, Hispanic, American Indian, or other ethnic backgrounds which meet Federal minority requirements.

**ARMY ROTC SUPPLEMENTAL SCHOLARSHIPS** are attractive supplements awarded to high ability ROTC students who are attending The University of Memphis on an Army ROTC scholarship. The scholarships are awarded based on academic merit and leadership potential. The scholarship funds can be used toward any school-related expense.

**ARMY ROTC LEADERSHIP SCHOLARSHIP PROGRAM** offers scholarships to students who attend The University of Memphis and enroll in the Army ROTC program. The scholarships are awarded annually based on demonstrated leadership and academic merit. The scholarships pay full in-state tuition and are restricted to full-time undergraduate students. The scholarships are renewable for up to 8 semesters for four-year students, 6 semesters for three-year students, and 4 semesters for two-year students.

**NAVY ROTC SCHOLARSHIPS** pay for tuition, textbooks, fees of an instructional nature and a subsistence allowance. Four-year scholarships are awarded annually based on a competitive selection process in which consideration is given to such factors as high school records, college board scores, extracurricular activities, and leadership qualities. Students who do not receive a four-year scholarship through the national scholarship competition but are sincerely interested in the challenge of becoming a Navy or Marine Corps Officer may

enroll as a College Program Midshipman. These students do not initially receive financial benefits but they are eligible to compete for scholarships that provide tuition, textbooks, fees of an instructional nature and a subsistence allowance for the remaining three years of their degree program. The Navy also has a two-year scholarship program available to students beginning their junior year in college.

**THE JAKE FONDREN SCHOLARSHIP** recipient must be a U.S. citizen and an undergraduate of good academic standing who demonstrates financial need and exhibits a definite interest in golf.

**THE CURTIS PERSON GOLF SCHOLARSHIP** is awarded to undergraduates, either male or female, who exhibit an outstanding talent for golf. Recipients must be U.S. citizens, in good academic standing, and demonstrate financial need.

**THE COCKROFT LAUGHLIN BASEBALL SCHOLARSHIP** is awarded to a student athlete who is nominated by a chartered Tennessee Fellowship of Christian Athletes Chapter, a Tennessee resident, and a member or prospective member of The University of Memphis's baseball team.

**DOUG GRANGER MEMORIAL SCHOLARSHIP** is awarded to a member of the baseball team who is a scholar/athlete. Recipient must exemplify the fierce competitiveness and leadership qualities which were attributes of the late Doug Granger.

**THE U of M HANDBALL SCHOLARSHIP** is given to students participating on the U of M Handball Team. Recipients are selected on the basis of athletic ability and leadership.

**BAILEY PRICHARD MEMORIAL RACQUETBALL SCHOLARSHIP** assists student athletes on The University of Memphis Racquetball Team. The recipient must maintain a 2.5 minimum GPA.

**HELEN HAMILTON PERSON MEMORIAL GOLF SCHOLARSHIP** provides assistance for female undergraduate students who are talented golfers and who maintain a minimum GPA of 2.5.

**C. HILLMAN ROBBINS MEMORIAL SCHOLARSHIP** assists students who are members of The University of Memphis Golf Team.

**THE AVRON FOGELMAN BASEBALL SCHOLARSHIP** is awarded to members of The University of Memphis baseball team.

**THE TIM McCAGE MEMORIAL SOCCER SCHOLARSHIP** is awarded to a freshman from the West Tennessee area who is a member of The University of Memphis Soccer Team.

**THE CHARLIE MULWEE SCHOLARSHIP** is awarded to members of the U of M Handball Team. Recipients must be in good academic standing.

## Grants

The following grants are need-based programs that do not require repayment. Grants are only available to students who are pursuing their first bachelor's degrees.

### FEDERAL PELL GRANT

The Federal Pell Grant program provides awards ranging from $400 to approximately $4,000 based the Expected Family Contribution and the enrollment status of the student. The highest awards are for full-time attendance (12+ credit hours per semester). A Pell Grant is limited to the equivalent of two full-time semester awards during an academic year plus the summer terms.

### FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT

The Federal Supplemental Educational Opportunity Grant program provides awards ranging from $500 to $4,000 to Pell Grant eligible students based on their financial need - the difference between the total student budget and the Expected Family Contribution. Initial awards are for fall and spring semesters. Summer awards are only available if there are funds remaining.

### THE TENNESSEE STUDENT ASSISTANCE AWARD PROGRAM

The Tennessee Student Assistance Program is available to residents of the State of Tennessee. To qualify, students send in the Free Application for Federal Student Aid early enough to be processed by May 1 preceding the start of a fall semester. The student must be Pell Grant eligible. Award amounts depend on annual funding and are for fall and spring semesters only.

## Loans

Each of the federal loan programs require at least half-time enrollment (six credit hours). Payments can be deferred for continued half-time enrollment and canceled for specific types of employment after graduation (for example, teaching). Additional deferment/cancellation information is available from the Student Financial Aid Office.

### FEDERAL PERKINS LOAN PROGRAM

The Federal Perkins Loan program is a need-based program that provides low interest loans for up to $2,500 per academic year. These loans are awarded to students that have the highest financial need - the difference between the total student budget and the Expected Family Contribution. The interest rate is 5% annually and payments begin nine (9) months after the student is no longer enrolled at least half-time. Initial awards are for fall and spring semesters. Summer awards are only available if there are funds remaining.

### FEDERAL DIRECT SUBSIDIZED STUDENT LOAN

The Federal Direct Subsidized Loan is a need-based program that provides low interest loans. Loan amounts are awarded based on the student's financial need – the difference between the total student budget and the Expected Family Contribution. Payments on subsidized loans are deferred until six (6) months after the student is no longer enrolled at least half-time.

### FEDERAL DIRECT UNSUBSIDIZED LOAN

The Federal Direct Unsubsidized Loan is a non-need based program that provides low interest loans. Although this program is not based on financial need, a student's eligibility for subsidized loan must be determined before an unsubsidized loan can be approved. Interest payments on unsubsidized loans begin within 60 days of the disbursement of the loan. Interest can be deferred while the student is enrolled at least half-time but is added to the loan principal in a process called "capitalization."

### DIRECT LOAN AMOUNTS

For students who meet the federal definition of being dependent (refer to the FAFSA for this definition), the maximum annual loan amounts including fall, spring and summer for a subsidized loan plus an unsubsidized loan are based on the academic year of the student:

| | |
|---|---|
| Freshman | $2,625 |
| Sophomore | $3,500 |
| Junior/Senior/ 2nd Bachelor's | $5,500 |

For students who meet the federal definition of being independent (refer to the FAFSA for this definition), the following additional maximum annual unsubsidized loan amounts including fall, spring, and summer are available based on the academic year of the student:

| | |
|---|---|
| Freshman/ Sophomore | $4,000 |
| Junior/Senior/ 2nd Bachelor's | $5,000 |

The amount of subsidized loan cannot exceed the student's financial need when combined with any other financial aid programs received by the student, and the amount of subsidized plus unsubsidized loan cannot exceed the total student budget when combined with any other financial aid programs received by the student.

### ENTRANCE AND EXIT INTERVIEWS

First-time borrowers are required to have an entrance interview prior to the disbursement of a Direct Loan in order to familiarize them with the terms of repayment and their rights and responsibilities. Both Direct Loan and Perkins Loan borrowers are required to have an exit interview when they graduate or discontinue attendance at The University of Memphis.

### FEDERAL DIRECT PLUS LOAN

The Federal Direct Plus Loan is a non-need based low interest loan available to parents of students who meet the federal definition of being dependent (refer to the FAFSA for this definition). To apply, students or parents complete a loan request form obtained from the Student Financial Aid Office. Approval for this loan requires a credit check. The maximum loan amount is the difference between the total student budget and any other financial aid being received by the student. Principal and interest payments begin within 60 days of the disbursement of the loan. PLUS loans are available for fall, spring, and summer.

### TENNESSEE TEACHING SCHOLARS PROGRAM

The Tennessee Teaching Scholars Program is a forgivable loan up to $1,500 per academic year for college juniors, seniors, and post bachelor's degree students admitted to a state-approved teacher education programs at an eligible Tennessee post-secondary institution. The student must pledge to teach at the public preschool, elementary, or secondary level in Tennessee one year for each year the award is received. Applications and information about this program may be obtained from the Tennessee Student Assistance Corporation, The University of Memphis College of Education, or the Scholarship Office.

### INSTITUTIONAL/PRIVATE LOAN PROGRAMS

The University has privately funded loan programs to meet the needs of students who may not be eligible for the federal or state loan programs, or who can repay within a short time.

### FREEMAN LOAN PROGRAM

The Freeman Loan Program was established for the sole purpose of providing worthy/needy students loans to help pay a part of their educational costs when other financial assistance is not available. Eligibility for this low interest, long-term loan program is based upon satisfactory academic progress and financial need. The application for this program is the FAFSA, which is available from the Student Financial Aid Office.

### C.I.O.S. LOAN

The C.I.O.S. Loan program is a privately funded non-need based program to help students meet expenses. Full time students (12 credit hours undergraduate or 9 credit hours graduate) who have a minimum GPA (2.5 undergraduate; 3.0 graduate), have completed at least one semester at The University of Memphis, and have not previously defaulted on a student loan are eligible to borrow up to $1,000 per semester, $2,000 per academic year, including summer. The interest rate is 5% and payments begin six (6) months after ceasing full-time attendance at The University of Memphis. This loan program requires an application that is available from the Scholarship Office.

### GENERAL EVERETT R. COOK ARNOLD AIR SOCIETY LOAN

This loan fund was established to provide financial assistance in the form of short-term loans for students enrolled in the Professional Officer Course of the Air Force Reserve Officers Training Corps. Applications for this loan are available from Air Force ROTC.

### GENERAL RALPH H. WOOTEN LOAN

This loan fund was established for the purpose of providing low interest educational loans to students enrolled in the Air Force Reserve Officers Training Corps. Applications for this loan are available from Air Force ROTC.

### UNIVERSITY BOOK LOAN

The University Book Loan is a 15% interest-bearing loan, with a maximum loan amount of $250. Any amount approved will be credited to the student's Tiger Fund$ Account and must be used for textbooks and other educationally related materials. This loan (interest plus principal) must be repaid by November 1 of the fall semester, April 1 of the spring semester, and by August 1 of the summer semester. Applications for this loan are available from the Bursar's Office.

## Student Employment

The University of Memphis offers two programs of on-campus employment. Federal Work-Study is a need-based financial aid program. The regular student employment program is not need-based and is available to any student enrolled at least half-time. Job openings for both programs are posted in the Student Employment Office.

### FEDERAL WORK-STUDY

Federal Work-Study (FWS) is a need-based financial aid program that provides employment opportunities. FWS awards are based on the student's financial need – the difference between the total student budget and the Expected Family Contribution. The amount awarded is the maximum the student can earn during the fall and/or spring semesters, or during the summer terms. Initial awards are for fall and spring semesters. Summer awards are only available if there are funds remaining. FWS earnings are excluded when completing the FAFSA.

### REGULAR STUDENT EMPLOYMENT

The regular student employment program provides employment opportunities regardless of the student's financial need. Earnings under the regular student employment program are included when completing the FAFSA.

### INTERNATIONAL STUDENTS

Pursuant to federal regulations of the Immigration and Naturalization Service, there is a restriction on the number of hours students on certain visas may work. International students who have questions regarding student employment should contact the International Student Advisor.

## Return of Funds/Earning Your Financial Aid

The Higher Education Amendment of 1998 established the concept that federal financial aid must be earned through class attendance. A student has not earned 100% of his/her financial aid until he/she has attended at least 60% of the term. If a financial aid recipient totally withdraws on or before the 60% point of the term, there is a portion of the aid that has not been earned (the date through which a student has attended 60% is published in each term's *Schedule of Classes*. The unearned portion of the aid is equal to the percentage of the term remaining at the point of withdrawal and must be returned to the Department of Education. The unearned portion is repaid by both the student and the school based on a federal formula. The school can use any refund generated by the withdrawal to pay the potion it owes back. However, depending on the time of withdrawal, the student may also be responsible for repaying a portion of his/her fees that had been previously paid by the financial aid.

Students who withdraw though the 60% point of the term will receive a letter indicating how much they are responsible for repaying to the federal financial aid programs and to The University of Memphis.

*The following example illustrates the Return of Funds:*

A student withdraws on the tenth day of a term that is 100 days long. He/she has received $2,000 in federal grants which paid the fees of $1,500 and gave the student a balance check of $500.

### Calculating the Unearned Financial Aid

Length of Term = 100 days

Days Not Attending = 90 (100-10)

Total Financial Aid = $2,000

Total Fees = $1,500

Percent of Aid Unearned = 90 (90÷100)

Total Unearned Aid = $1,800 ($2,000 x 90%)

### Calculating the Repayments

Each student's balance is calculated based on the date of withdrawal, the amount of financial aid received, and whether the programs of financial aid received include grants or loans. **If a student must totally withdraw, it is best to attend class through 60% of the term to avoid any financial penalty.**

A balance is calculated based on the adjusted fees and reduced grants. The student is given a pro rata adjustment of the fees (refer to Refund of Registration Fees in this *Bulletin*):

Adjusted fees = $150 [$1,500 - $1,350 ($1,500 x 90%)]

Adjusted grant = $200 ($2,000 original grant - $1,800 unearned grant)

The student is due a $50 refund from the University based on the difference between the adjusted fees ($150) and the adjusted grant ($200).

The University must repay the lesser of the total unearned financial aid, or the total fees multiplied by the percent of aid unearned. Since total fees ($1,500) are less than total aid ($2,000), the amount to be repaid is based on the total fees. Total financial aid to be repaid by the University = $1,350 [$1,500 (fees) x 90%].

The student must repay the portion of the unearned aid not repaid by the University. Federal regulations allow unearned grant to be reduced by half. Student's portion of unearned grant = $450 ($1,800 unearned - $1,350 repaid by the University).

Grant to be repaid by student = $225 ($450 x 50%).

The Higher Education Amendments of 1998 specify the following order in which any unearned amounts are to be returned to Title IV financial aid programs: Federal Direct Loan Programs (unsubsidized then subsidized); Federal Perkins Loan Program; Federal Direct PLUS loans; Federal Pell Grant Program; Federal SEOG Program; any other programs funded by Title IV including the Tennessee Student Assistance Program; other federal, state, private or institutional aid programs. Any amount remaining after the applicable programs have been fully repaid is returned to the student.

## Satisfactory Academic Progress Policy for Financial Aid Recipients

All students who receive federal or state financial aid must be enrolled in a program leading to a degree and must meet federal and institutional standards for academic progress in order to establish and retain aid eligibility. Students receiving athletic or other University administered awards must also meet the satisfactory academic progress standards that have been established by awarding entity.

Academic progress for federal and state financial aid programs is based on three measures: cumulative grade-point average, completion rate based on credit hours completed compared to attempted, and a maximum time frame for degree completion. The following describes the University's standards for each of these three measures, and when these standards are reviewed:

#### I. Cumulative Grade-Point Average

The following standards apply to the combined transfer/University GPA.

Students must meet the following minimums which are consistent with the University's standard as published in this *Bulletin*. Quality hours are those credits used to compute the grade-point average (GPA) including grades of A,B,C, D, or F and transfer credits with grades of incom-

plete. The first attempt of a course that is repeated is excluded for the quality hour computation.

| QUALITY HOURS | MINIMUM GPA |
|---|---|
| 14.99 or less | No Minimum |
| 15.00-29.99 | 1.40 |
| 30.00-50.99 | 1.70 |
| 51.00-67.99 | 1.90 |
| 68.00+ | 2.00 |

**II. Completion Rate**

All students are required to complete a minimum of 66% of the credit hours **attempted** at The University of Memphis. Courses with a grade of "D" or better count as completed. Credit hours attempted included audits, incompletes, withdrawals, and repeated or failed classes.

**III. Probation**

Students whose number of credit hours completed is below 66% of credits hours attempted, but is at least 50%, will be placed on probation the first time this occurs.

**IV. Suspension**

Students whose number of credits completed is below 50% of credits attempted, or whose credits completed were below 66% and whose completion rates do not improve 66% by the next review, will be suspended from eligibility for grants, loans (with the exception of emergency, book LOANS), and Federal Work-Study employment.

**V. Maximum Time Frame**

The maximum time frame for the completion of a first degree is limited by federal regulation to 150% of the published length of hours. Up to 30 hours of required Transitional Academic Studies courses are excluded from the maximum time frame the degree program. Most undergraduate programs at The University of Memphis are 132 hours. The maximum number of hours during which a student is eligible to receive financial aid is 198. The 198 hours include transfer hours and all attempted.

**VI. Review of Progress Standards**

A. GPA is reviewed upon submission of a financial aid application, and at the end of each spring semester.

B. Completion Rate is reviewed annually at the end of each spring semester.

C. Time Frame is reviewed at the end of each fall and spring semester, and at the end of the summer sessions.

**VII. Notification/Appeals**

Students whose financial aid eligibility is suspended as a result of failure to meet one or more of the standards of satisfactory academic progress will be sent a letter from the Student Financial Aid Office including a Satisfactory Academic Progress Appeal form. In order for an appeal to be approved, it must be based on documented extenuating circumstances. For the GPA and completion rate standards, students can also restore their aid eligibility by improving their academic performance enough to meet the standard (s).

**VIII. Financial Aid Fresh Start**

Students accepted under the Academic Fresh Start Program will have their GPAs reviewed based only on courses completed at The University of Memphis.

# 3. Registration and Student Records

## Registration

All continuing students are expected to register during November for the following Spring semester and in April for the following Summer or Fall. Students are responsible for becoming familiar with the deadlines, rules, and regulations related to registration.

## Student Records

The Office of the Registrar provides grade reporting and transcript services. Current semester grades may be obtained on TIGERWEB at *www.tigerweb.memphis.edu*.

The University of Memphis requires written authorization from the student to release transcripts. Transcripts may be requested in person, room 003, Wilder Tower, by mail, or by FAX (901) 678-3249. Include the following information with your request: complete name, former names, Social Security Number, birth date, current address, first and last years of attendance, address (es) where transcript is to be mailed, number of copies to each address. ***Sign and date your request.*** There is no fee for transcripts; however, a transcript will not be released if student has not satisfied all obligations to the University. If you have any additional questions, please contact Transcripts Office at (901) 678-3927.

The University is required by state law to withhold grade reports and transcripts from students who have outstanding financial obligations to the University.

## Student and Faculty Services

Student and Faculty Services provides services to students related to their current term enrollment and their personal student biographic/demographic data. These include: schedule adjustments (drop/add/withdrawal), name changes, address changes, etc. This office is open some evenings and weekends. *http://www.memphis.edu/studentservices.html*

## Veterans Services

**Mission:** The Office of Veterans Services, (*http://enrollment.memphis.edu/registrar/veterans.htm*, provides assistance for eligible National Guard/Reserves, veterans and/or dependents who enroll at The University of Memphis and who make application for: (1) Programs of Education or Training, (2) VA Tutorial Services. Other assistance includes: liaison with Veterans Administration Regional Office, counseling, and counseling referral for personal, family, career, financial, and educational problems.

**Applications for VA Benefits:** Those who will be using VA educational assistance while enrolled at The University of Memphis should contact the Office of Veterans Services. They should also be prepared to furnish the following items as applicable:

1. The number 4 original or copy of the DD214 or other armed forces separation papers.
2. Copy of Delayed Enlistment Contract.
3. Copies of marriage licenses and children's birth certificates.

4. Copy of final divorce decree if either veteran or spouse has been previously married.
5. VA file number if different from social security number.

**Advance Pay:** Advance payment is available for eligible veterans and dependents who plan to enroll on at least a half-time basis. Applications will be accepted in the Veterans Services Office as early as 120 days before the term begins but no later than 45 days before the beginning entry. Generally, the advance pay deadline for the fall semester is around July 15, while spring semester deadline is around November 15. Advance pay checks include an allowance for the month or fraction thereof in which the course begins and the allowance for the following month. Advance pay checks are mailed to the school for delivery to the student at registration. Initial applicants who do not apply for advance pay may expect their check to be mailed to their home within six to eight weeks after registration.

**Enrollment Status:** For VA benefits during the regular terms (Fall and Spring), 12 semester hours constitute a full-time load for undergraduate students; 9 hours is full-time for graduate students. However, training time for summer session at the undergraduate and graduate level is based on the number of semester hours attempted per term. The Veterans Administration places restrictions on those who receive veterans' educational benefits. Some of these restrictions includes: (1) regular class attendance, (2) satisfactory academic progress, and (3) adherence to a specific degree plan.

**Degree Plan:** Only courses that are required for the degree and major may be certified for VA pay. VA will not pay for repeat courses if the grade already earned is accepted by the U of M and will fulfill graduation requirements toward the declared degree and major (even if the course was taken at another institution with or without use of the G.I. Bill). VA will not pay for elective courses in excess of those needed to meet graduation requirements.

Although advisors are provided for veterans, this assistance does not relieve students of the responsibility for fulfilling all VA and University requirements.

**Certification:** Enrollment certifications are mailed and/or electronically submitted to the appropriate VA Regional Office upon receipt of the Veterans Request for Certification Form. Students are required to submit this form to the Veteran Services Office at The University of Memphis each semester. Students will be certified on a term-by-term basis. Pre-certification will be done only when a request for advance pay is made.

# 4. Adult Student Development Services

## Adult and Commuter Student Services

Adult and Commuter Student Services, (*http://enrollment.memphis.edu/adultstudent/default.htm*), serves adult students who are beginning or returning to school after some time in the workplace or home, and traditional and non-traditional age commuter students.

Located in the University Center, Adult and Commuter Student Services maintains the Adult Information Center, a resource area where services and special programming for this student population is posted regularly. Information on the Adult Scholarship program is also available.

The Adult Student Association, a student organization geared toward the social needs of the returning student is maintained through Adult and Commuter Student Services. This organization provides an informal way for students to receive support during their educational experience and to express concern about any particular issues that may arise. "Lifelong Learning with Friends" is the motto of the Adult Student Association, which serves as a network for the returning student.

## Childcare Center

Childcare services are available for The University of Memphis students. Space is available on a first come/first serve basis. The center accepts children between the ages of 30 months and 12 years.

During the fall and spring semesters, the center's hours are Monday through Thursday, 7:30 a.m. to 9:00 p.m., Friday, 7:30 a.m. to 4:30 p.m. and Saturday 8:30 a.m. to 12:30 p.m. The summer semester operating hours are Monday through Thursday from 6:30 a.m. to 9:00 p.m. and Friday from 6:30 a.m. to 4:30 p.m. *Hours of operation may vary due to enrollment.* For additional information, come to the Child Care Center located at 3875 Tiger Paw South (Northeast of the Central Avenue Parking Lot-adjacent to the University town-home community).

# Student Development

The quality of The University of Memphis is reflected not only in the content of its academic programs but also in the array of services and activities provided for its students. At U of M, satisfying the individual needs of students has become an ever-increasing commitment, regardless of whether those needs are personal, academic, psychological or social.

The University strives to make student life fulfilling in an environment conducive to academic growth. The range of support services provided includes counseling, skills training, tutoring, health care, and job placement, to name only a few.

## The Center for Student Development

The Center for Student Development is a comprehensive counseling facility providing academic, psychological, and career resources for students to draw upon as they confront the developmental tasks concomitant with their educational experience. The Center for Student Development encompasses a variety of free counseling and helping activities through its various components. As part of its educational mission the center offers an APA approved Pre-Doctoral Internship Training Program for graduate students in clinical and counseling psychology and is accredited by the International Association of Counseling Services.

### Academic Counseling Unit

All freshmen, transfer, and readmitted students who have not decided upon an academic major are assigned to the Academic Counseling Unit (ACU). The purpose of the ACU is to provide academic counseling that will prepare students to choose a major and then be enrolled into one of U of Memphis's degree granting colleges. The counselors are available by appointment to discuss the many academic programs offered and to help the students explore these possibilities as they relate to their personal and educational goals.

### Psychological Counseling

The psychological counseling component provides students with the opportunity to discuss and explore any concerns and feelings that are of importance to them. Problems in relationships, feelings of loneliness or inadequacy, family or marriage difficulties, depression, the inability to concentrate or study, or simply "feeling the need to talk things out" are all examples of concerns that are dealt with through psychological counseling. The staff is professionally trained and experienced in working with a wide variety of student concerns through individual and group counseling, testing, programs and workshops, and referral to additional service centers on and off campus. The counselors subscribe to the confidentiality policy in the ethics and guidelines established by the American Psychological Association.

### Career Counseling

Career Counseling affords students an opportunity to explore self, career options, obtain information relating academic majors to career choices, evaluate employment outlook information, and develop realistic career goals. Through counseling, computer assistance and testing, each person is given the opportunity to make a well-considered career choice.

### The Testing Center

The Testing Center provides testing services for University and professional school admissions purposes as well as for licensure and certification in a variety of professional areas. The center also offers a variety of personality and psychological tests.

### Educational Support Program

The Educational Support Program (ESP) provides free tutorials through six learning centers: Academic Enhancement (General Education courses, study, reading, test-taking strategies), English (writing across the curriculum), Mathematics (math for all courses), Business (all courses in those majors), Foreign Language (Spanish and other languages), Engineering/Engineering Technology (all majors). Students must be enrolled in the course at U of M for which the tutorial is requested. Tutors are available for both individual and group study sessions. Workshops are regularly presented and can be scheduled for classes and organizations.

## Athletic Academic Services

The Center for Athletic Academic Services provides counseling, tutoring, scheduling assistance, career planning and special services for all The University of Memphis student athletes. The center also handles NCAA interpretations and the academic eligibility requirements of student athletes.

## Student Disability Services

Student Disability Services provides information and support services that enable students with disabilities to take full advantage of the educational opportunities at The University of Memphis. Specific services are determined individually and are based on functional limitations caused by disability. Services include pre-enrollment planning; specialized orientation; early registration; adapted campus housing; academic aids such as readers, note takers, and interpreters; test accommodations; books on tape; large print and Braille materials; adaptive computer technology and other special aids; assistance arranging classroom accommodations; campus shuttle service; supportive guidance and counseling; and liaison with state rehabilitation agencies. Some services require advance notice to arrange. Applicants should provide sufficient notification to Student Disability Services of their needs and enrollment date. Given adequate time, experienced staff will provide assistance in evaluating individual needs and in developing a plan for appropriate disability services.

All persons who have a permanent disability are encouraged to register with Student Disability Services and to provide this office with medical documentation of their disability. This registration entitles qualified students with disabilities to the legal rights provided under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. For more information, please contact the Director of Student Disability Services.

## Career And Employment Services

Career and Employment Services (C&ES) helps prepare students and alumni with proficient job search skills as well as locating employment with business, education, government, industry, and non-profit organizations. Services provided include: on-campus interviews with employer representatives; job listings of employment opportunities on the World Wide Web through "JobTrak"; an employer resource library; and online job matching/referrals service allowing employers to view resumes of students utilizing "Career Connection" software.

In addition, C&ES co-sponsors four Career Fairs annually. The fairs occur in the Fall and Spring semesters which include: a **Corporate and Government Career Fair** co-sponsored with the Alumni Association, the **Graduate School Fair**, co-sponsored with the U of M Graduate School College of Arts and Sciences, and Kaplan Educational Center, the **Career Showcase** (A Diversity Career Fair), and the **Mid-South Education Fair**.

Individual counseling is available to students needing assistance with resumé writing, cover letters, and their job search. Career Seminars are given throughout the fall and spring semesters on topics including: Resumé writing, Successful Interviewing Skills, Dress for Success, Negotiation Job/Salary Offers, and Gaining the Internship Advantage.

Many services are offered free of charge. For purposes of interviewing, registration for services is required and it is recommended that seniors and graduate students register three semesters prior to graduation. C&ES is open Monday and Tuesday 8:00 a.m. – 6:00 p.m., and Wednesday through Friday 8:00 a.m.– 4:30 p.m.

Off-campus part-time employment opportunities for currently enrolled students are also coordinated in C&ES. *http://www.people.memphis.edu/~univplace/*

## Student Health Services

**Location and Hours:** Student Health Services is located on the main campus at 3770 DeSoto Avenue, south of McWherter Library. It is open Monday through Friday, 8:00 a.m.- 4:30 p.m. throughout the year. The facility is closed evenings, weekends, holidays, and announced University Holidays. Early evening hours may be available Monday through Thursday, 4:30-6:00 during the Fall and Spring semesters.

**Eligibility for Care:** Medical services are available only to students, faculty, and staff members. Each visit to Student Health Services requires that the individual present his/her validated identification card before treatment, except in cases of emergency.

**Services:** Student Health Services is staffed with a physician, a nurse practitioners, registered nurses, LPN, a Laboratory and X-ray technologist, health educator, and various administrative support personnel. Student Health Services' major emphasis is on the diagnosis and treatment of short-term, acute, medical illnesses on an outpatient basis. One's family doctor should continue to be the primary source for medical care. A Family Planning Clinic is provided by the Memphis and Shelby County Public Health Department at Student Health Services every Wednesday, Thursday and Friday. The Family Planning Clinic provides birth control information, devices, medications, and examinations (by appointment). First aid only is available for visitors to campus and for workman's compensation injuries.

**Charges:** Routine diagnosis and treatment of illnesses and injuries, X-rays, most laboratory analyses, and specialized clinics are free of charge for students. Faculty/Staff personnel are seen for nominal office and laboratory/X-ray charges. When more in-depth evaluation or treatment is needed the patient is referred off-campus, and the patient is responsible for all charges incurred for these services. The patient will be asked to pay Student Health Services directly prior to the performance of the specialized lab tests. Payment may be made by cash, check, MasterCard/Visa credit card or Tiger Fund$. Charges for Family Planning Clinic are on a sliding fee scale basis, and are separate from Health Services charges (i.e., cash or checks only).

**Health Insurance:** The Tennessee Board of Regents has authorized a private insurance company to provide health insurance for students. Students may pick up a brochure about the insurance from Student Health Services. The student pays the insurance company directly for the policy.

# Student Life

Student Life offers students a wide variety of services and learning experiences outside the formal classroom setting. Included in the area of Student Life are the departments of Campus Recreation and Intramural Services, Minority Affairs, Residence Life and Dining Services, Student Judicial and Ethical Programs, Student Leadership and Involvement, and the University Center. The Office of Student Life also serves as liaison with the campus religious centers and as advisor to the Student Government Association. Information may be obtained from the Office of the Dean of Students, *http://www.people.memphis.edu/~studentlife/.*

## Emerging Leaders

This student development program consists of academic courses, structured activities, and experiences that are designed to develop and refine participants' leadership abilities. While all students are eligible to apply for participation in the program, participation is mandatory for students who have Emerging Leadership Scholarships.

Emerging Leaders are required to take leadership courses for credit, hold offices in diverse student organizations, serve as mentors for underclassman students, and remain active in volunteer service. Upon completion of the program, students receive official documentation on leadership transcripts, which confirm extensive involvement and instruction in the program.

## General Fraternities and Sororities

Thirteen international fraternities and eleven international sororities are active on The University of Memphis campus. The University strives to maintain a strong Greek community through coordination of Greek activities provided by the Office of Greek Affairs in areas of social service, scholarship, spiritual life, social development, and sense of leadership.

**Fraternities:** Alpha Phi Alpha, Alpha Tau Omega, Kappa Alpha Order, Kappa Alpha Psi, Kappa Sigma, Lambda Chi Alpha, Omega Psi Phi, Phi Beta Sigma, Phi Gamma Delta, Pi Kappa Alpha, Pi Kappa Phi, Sigma Alpha Epsilon, Sigma Chi, and Sigma Phi Epsilon.

**Sororities:** Alpha Delta Pi, Alpha Gamma Delta, Alpha Kappa Alpha, Delta Gamma, Delta Sigma Theta, Kappa Delta, Phi Mu, Pi Beta Phi, Sigma Gamma Rho, Sigma Kappa, and Zeta Phi Beta.

## Campus Recreation and Intramural Services (CRIS)

The Campus Recreation and Intramural Services (CRIS) program is designed to fulfill a vital educational function and provide students, faculty, staff, and other members of the University community the opportunity to participate in a variety of activities for personal enjoyment and satisfaction.

CRIS supervises recreation at the Student Recreational and Fitness Center, which provides for the use of tennis courts, racquetball/handball courts, fields, gymnasiums, pools, fitness rooms, and other play areas; organizes intramural tournaments; coordinates a sports club program; and sponsors leisure course activities, clinics, and special events. The Student Recreation and Fitness Center provides excellent facilities for instructional, intramural, and sports and fitness programs. These programs, both individual and group, offer a wide variety of choices, and are offered at all levels of play. The student oriented CRIS staff gives personal attention to the needs of all individual participants.

**Dining Services:** The University has dining facilities, vending areas, and coffee bars open to all students.

## Student Judicial and Ethical Programs

The Office of Student Judicial and Ethical Programs is responsible for the administration and coordination of student disciplinary actions involving both social and academic misconduct under the Code of Student Conduct. The office is also a resource for the interpretation of policies that affect students and for programs on ethics and academic integrity. *http://www.people.memphis.edu/~studentlife/*

## Minority Affairs

The Office of Minority Affairs advises minority students with regard to their academic, social, personal, and financial concerns, and helps students to adjust to living and functioning in an urban university setting. The office also assists minority organizations with program planning and management.

In addition to advising students, the office is the home to the Black Student Association, Black Scholars Unlimited, Hispanic Student Association, and the NAACP. The office is also responsible for coordinating events in conjunction with Black History Month and Hispanic Heritage Month.

### Religious Affairs

Several religious organizations provide activities and communities that focus on the religious or spiritual development of University students. Many of these organizations have ministry facilities close to campus or utilize University facilities for their programs. Organized religious groups include: Baptist Student Union, Barth House (Episcopal), University Catholic Center, Christian Student Center (Church of Christ), Fellowship of Christian Athletes, Gospel Choir, Jewish Student Union, Latter Day Saints Student Association (Mormon), Muslim Student Association, RUF (Reformed University Fellowship), Wesley Foundation (United Methodist), River's Edge (Presbyterian USA), and Tiger Christian Fellowship.

### Residence Life

Residence Life, located in room 011, Richardson Towers, is the administrative office for The University of Memphis residence halls. Residential communities provide an environment to enhance individual growth and development through the implementation of educational, cultural, social, and recreational programs that encourage interaction among residents, faculty, and staff. Building accommodations and rental charges for each residence hall can be found in the Expenses section of this *Bulletin*.

### Michael D. Rose Theatre Lecture Hall

The Michael D. Rose Theatre Lecture Hall features a 968-seat theater with sound and lighting as well as a large movie screen with surround sound. The main lobby can be used as a meeting, reception, display or dining area. The entertainment lobby can be used for smaller group gatherings. Further amenities include a large concession area, student ticket office, and dressing room for entertainers.

### Student Activities Council

The Student Activities Council is the principal programming body for the University community. It is composed primarily of student volunteers for the purpose of providing social, cultural, recreational and educational activities, and events that appeal to a wide variety of tastes. Concerts, fashion shows, coffee house entertainment, movies, speakers, and cultural events are just a few of the many activities planned and facilitated by the Student Activities Council (SAC).

### Student Government

The Student Government Association (SGA) of The University of Memphis is a unique organization of students who work together and are committed to improving the University community. SGA represents all students, graduate and undergraduate, and strives to bring each student's interest to the forefront.

The University of Memphis SGA consists of the Executive members, the Senate, the Student Court, and the Freshmen Council. The SGA office is located in room 411, University Center.

### Student Organizations

Over 150 student organizations are registered with the University. Student organizations represent a broad range of endeavors including academic, social, spiritual, cultural, service, recreational, and special interest. For information, contact the Office of Student Activities.

### Volunteerism and Service-Learning

The Office of Student Activities promotes and supports service efforts by The University of Memphis students and works with local community agencies to engage students in a variety of meaningful service activities. The office serves as a resource center for community service programming in order to help students expand their understanding of social/community issues, develop leadership skills, and work on solutions to real life problems. For more information on these initiatives, contact the Office of Students Activities, room 425, University Center.

### University Center

The University Center is the focal point for activities and events in the University community. Along with its many programs and activities, the center provides conveniences such as food service, catering, automatic banking, discount tickets for community events, game room, University post office and 3,800 mail boxes, rental lockers, television, lost and found, email stations, vending, public phones, ballroom, meeting rooms, electronic news and advertising display, rider-driver board, University Tours office, information desk and central scheduling for University Center, Alumni Mall and student plaza. The Center is an organization with programs designed to encourage students and other members of the University community to meet and share interests and talents in an action-learning setting.

## Other Activities and Services

### Intensive English for Internationals (ESL)

The intensive English language program has been developed to meet the needs of internationals in Memphis and the surrounding area, and from abroad. English language instruction for non-native speakers of English is offered at five levels of instruction. For students coming from abroad, the program follows the University calendar for the fall and spring semesters. An eight-week session is offered during the summer. Internationals residing locally can enroll for shorter periods of time. Classes designed to meet special needs can also be arranged outside of those regularly scheduled.

### International Programs and Study Abroad

The Office of International Programs administers semester and year-long exchange programs and facilitates study abroad programs for shorter periods of time. Exchanges are currently available at more than 120 colleges and universities in some 40 countries through the International Student Exchange Program (ISEP) and the College Consortium for International Students (CCIS). Some of the ISEP and CCIS programs are taught totally in English and others totally in the native language, but many provide the opportunity to increase language skills while taking other courses in English.

Direct or one-on-one exchanges are also administered by International Programs. The University of Memphis currently has agreements for such exchanges with universities in China, Czech Republic, France, Japan, Korea, Germany, Netherlands, and the United Kingdom. Negotiations to add to the number of exchange partners are underway, both direct and through our affiliated programs.

Short-term study programs in the summer are offered by faculty members of The University of Memphis and through consortia and affiliated programs. Spanish study in Costa Rica and the British Studies Program in London are among the more popular offerings. The Office of International Programs

also maintains a library of information on other international programs for semester or summer study around the world. International Student Identification Cards which provide insurance and discounts for students traveling abroad may be purchased at the Office of International Programs.

Competitive Study Abroad Scholarships are available to academically able students. In order to assist with the added cost of international travel, financial aid, which is available for on-campus study, is available for study abroad as well.

The Office of International Programs welcomes the opportunity to advise students on the possibilities of study abroad.

### Pre-Law

Law schools do not prescribe a definite pre-law curriculum for prospective applicants. Therefore, there is no single major required for pre-law students. Instead, law schools seek to attract applicants possessing a broad educational background. The University of Memphis offers a minor in Legal Thought and Liberal Arts, designed for students who intend to enter the legal profession. Course work in the minor introduces students to the major intellectual traditions of the West and assists in the development of the skills necessary for future success in law school.

The Pre-Law Society provides students the opportunity to meet practicing attorneys, judges, law school faculty and admissions officers as well as other students with similar interests. The society, in cooperation with the Cecil C. Humphreys School of Law, sponsors an annual orientation afternoon at the law school during which members have the opportunity to attend classes and meet law faculty and students.

Students interested in law school, the minor in Legal Thought and Liberal Arts or the Pre-Law Society should contact the Pre-Professional advisor in room 209, Mitchell Hall.

### The University Store

The University Store is managed by Barnes and Noble Bookstores, Inc. for the convenience of students, faculty and staff. In addition to textbooks and required school supplies, the store handles a large selection of general books, complete line of insignia clothing and gift merchandise, microcomputers, art supplies, and a variety of items for the convenience of the resident students.

### Post Office

The University Post Office has post office boxes available for rent by students and faculty. Student mail should be addressed as follows:

Student Name
The University of Memphis
XXXX Campus Postal Station
Memphis, TN 38152-xxxx

### Automobiles on Campus

Each student who operates and parks any motor vehicle on the campus of The University of Memphis must be registered with the Parking Office by receiving an official permit (hang tag). Permits (hang tags) are permanent and must be displayed when parking a vehicle on campus. The Parking Office will issue each new student a permit (hang tag) when the student registers for classes. The student will receive a validation sticker for placement on the original parking permit every subsequent semester that he/she registers.

A valid parking hang tag does not guarantee a parking space on University property. It is the driver's responsibility to locate an authorized parking space and abide by the parking rules and regulations of The University of Memphis. Citations will be issued and vehicles may be towed for violations.

### Art

The Department of Art sponsors visiting artists and lecturers, workshops and symposia through the academic year. The Art Museum of The University of Memphis (AMUM) provides students and the community with an on-going schedule of exhibitions. It also houses permanent collections of African and Egyptian art and artifacts. The Museum maintains a wide selection of objects from ancient to contemporary that are available for student research.

### Music

The Department of Music presents annually some 200 concerts, recitals and other cultural events to the University and community at large. It offers many activities and programs in which students may participate as individuals or as groups. Qualified students, regardless of major, may participate in the numerous musical groups including the University Symphony Orchestra, the University bands, and a variety of choral groups and small instrumental ensembles. Additionally the University's state-of-the-art recording studios are open for student use after proper instruction.

### Theatre and Dance

The Department of Theatre and Dance sponsors guest artists, workshops, and a full season of theatre and dance productions available to all full-time students. Additionally, all students, regardless of major, are invited to participate in departmental productions either as performers or backstage persons. Production opportunities exist in both the main theatre and dance season as well as many informal activities such as Lunchbox Theatre.

### Communication

Programs in radio, television, and film are offered by the Department of Communication. WUMR-FM 92 is student operated. Two state-of-the-art television/film studios also offer students the opportunity to participate in broadcasting quality productions.

### Publication

Students write and edit *The Helmsman*, the University newspaper (4 issues per week).

### Goodwyn Institute Lectures

The lectures and addresses offered by the Goodwyn Institute cover a variety of subjects. The purpose of these lectures is to provide a system of continued education for adults and youths along general and special interests, concentrating on illustrated lectures covering all areas of the world, and to afford authoritative and accurate information upon practical and cultural subjects.

### Cheerleaders

The University of Memphis cheerleaders are one of the "Premier College Squads in the Nation." The cheerleading squads consist of a Varsity team (up to 10 couples) and an all-women "Blue Squad" that has 14 to 16 members. The mascot,

"Pouncer," and both squads cheer at all University of Memphis home football and basketball games. The Blue Squad also cheers for the Lady Tigers' home games in the Field House on The University of Memphis campus. The cheerleaders and "Pouncer" are involved in an array of community and University activities. For additional information, contact the Cheerleading Office, room 375, Field House.

### Pom Pon Squad

The University of Memphis Pom Pon Squad is the top dance team in the country, having won the National Championships nine times. There are two squads, the Varsity and Junior Varsity. Both squads perform at all home football games. The Varsity attends all men's basketball games, performing halftime shows at selected games. The Junior Varsity performs at the Lady Tigers' home games. For additional information, contact the Pom Pon Office, room 377, Field House.

## Honors and Awards

### Honor Societies

*Alpha Epsilon Delta,* international premedical honor society

*Alpha Kappa Delta,* the national honorary society in sociology

*Alpha Lambda Delta,* a national honor society for freshman students

*Black Scholars Unlimited,* an honor society promoting academic experiences in scholarship, leadership, and service with special emphasis towards black students

*Chi Beta Phi,* a national science and mathematics honorary society

*Chi Sigma Iota,* a national counseling honor society

*Gamma Beta Phi,* an honor and service society

*Gamma Theta Upsilon,* a national honorary society for geography students.

*Golden Key National Honor Society,* a national interdisciplinary honor society for academically outstanding juniors and seniors

*Honors Students Council,* an organization for University Honors students

*Kappa Delta Pi,* a national honor society in education

*Lambda Pi Eta,* a communications studies honorary

*Mortar Board,* a national honor society established to provide for cooperation among honor societies for seniors

*Omicron Delta Kappa,* the National Leadership Honor Society

*Order of Omega,* a national honor society for members of Greek fraternities

*Phi Alpha Theta,* the national honor society in history

*Phi Eta Sigma,* a national freshman scholastic honor society

*Pi Delta Phi,* a society to recognize outstanding scholarship in French language and literature

*Pi Sigma Alpha,* the national honor society in political science

*Pi Tau Sigma,* the national honor society in mechanical engineering

*Psi Chi,* the national honor society in psychology

*Sigma Delta Pi,* the national Spanish honor society

*Sigma Pi Sigma,* a national honor society for physics students

*Sigma Tau Delta,* a national honor society for English language and literature students

*Tau Beta Pi,* a national engineering academic honor society

### Awards

*Who's Who Among Students in American Universities and Colleges,* one of the highest honors that a student may receive at The University of Memphis

### THE COLLEGE OF ARTS AND SCIENCES

**THE BETA BETA BETA AWARD** is annually presented to the graduating senior and member of the society who graduates with the highest grade point average in Biology.

**BIOLOGY FACULTY AWARD** is presented to the undergraduate student who makes the most significant contribution to the department.

**THE AMERICAN INSTITUTE OF CHEMISTRY AWARD** is presented to the graduating Chemistry major who best demonstrates leadership, ability, character and scholastic ability.

**THE DEPARTMENT OF CRIMINAL JUSTICE** annually presents the Mu Sigma Chi Professional Criminal Justice Award to the student of Criminal Justice deemed outstanding in professional activities.

**THE DEPARTMENT OF ENGLISH** offers several awards:

a. The Distinguished Scholarship Award presented each year to the English major whose work demonstrates an unusually high order of academic excellence.

b. Honors Thesis Award presented in recognition of the outstanding honors thesis by a student in the English Honors Program.

c. Giem and Collins Writing Contest: Presented for excellence in student writing produced in freshman and sophomore English courses. Rules and entry forms are available in room 463, Patterson.

**FRENCH GOVERNMENT ASSISTANTSHIPS**: The French Government through the French Embassy in The United States, on the recommendation of the French Section of the Department of Foreign Languages, each year awards one or more assistantships in France for the teaching of English in secondary schools.

**THE DEPARTMENT OF GEOLOGICAL SCIENCES** annually presents the Outstanding Senior Award to the outstanding major exhibiting scholarship, leadership and service.

**THE DEPARTMENT OF GEOGRAPHY** presents each year the Paul H. Sisco Award to the outstanding senior Geography major.

**THE DEPARTMENT OF HISTORY** annually presents the Tennessee Historical Commission Award to that senior student of History judged by the faculty to be the outstanding History major. The department also presents an award for the outstanding paper presented by an undergraduate.

**THE DEPARTMENT OF MATHEMATICAL SCIENCES** annually presents the R. P. Clark Memorial Award to an outstanding junior.

**THE DEPARTMENT OF PHILOSOPHY OUTSTANDING STUDENT AWARD** is presented to that student of Philosophy chosen on the basis of high scholastic achievement papers written, and performance in senior honors seminars.

**THE DEPARTMENT OF PHYSICS** each year presents the Outstanding Student Award to the most distinguished senior Physics major.

**THE DEPARTMENT OF POLITICAL SCIENCE** presents the Outstanding Student Award each year to the graduating senior majoring in Political Science who has compiled the best record of academic achievement in the discipline. Also The John W. Burgess Award is presented for meritorious achievement in Political Science, and the Pre-Law Award is presented

to the political science major whose pre-law studies demonstrate high promise for a distinguished legal career.

**THE DEPARTMENT OF PSYCHOLOGY** presents annually The Dr. Milton C. Addington Award for Excellence in Psychology to the senior Psychology major exhibiting the most individuality, interest, initiative, integrity, creative ability and originality.

**THE DEPARTMENT OF SOCIOLOGY** annually presents The Outstanding Student Award to the senior student judged to be the outstanding Sociology major. Also the Division of Social Work presents the Graduate with Distinction Award to the graduate who has been selected for dedication, achievement, and potential for professional service.

**ALPHA EPSILON DELTA**, pre-medicine and allied health professions honor society, annually presents the Student of the Year Award to the member who has demonstrated outstanding leadership, loyalty, and responsibility.

**CHI BETA PHI SCIENCE AWARDS**: Students who have attained the highest academic average during their four years of study in each of the following disciplines: Biology, Chemistry, Geology, Mathematical Sciences, Physics, and Psychology are honored by having their names inscribed on a plaque.

## THE FOGELMAN COLLEGE OF BUSINESS AND ECONOMICS

**DEAN'S AWARD FOR MOST OUTSTANDING STUDENT** is presented to an outstanding student who has displayed strong leadership, outstanding character, scholarship, and who is active in department and campus activities.

**SCHOOL OF ACCOUNTANCY OUTSTANDING GRADUATE AWARD** is presented to the graduating student who has the highest overall scholastic average among all Accountancy majors.

**THE TENNESSEE SOCIETY OF CERTIFIED PUBLIC ACCOUNTANTS AWARD**, Memphis Chapter, is presented annually to the graduating student who has the highest overall scholastic average among all Accountancy majors.

**THE OUTSTANDING ECONOMIC UNDERGRADUATE STUDENT AWARD** is presented by the Department of Economics to a junior or senior Economics student with the highest grade point average. A similar award is presented to the graduate student in Economics.

**THE MEMPHIS CHAPTER OF THE SOCIETY OF CHARTERED PROPERTY CASUALTY UNDERWRITERS** annually awards a check and a plaque to the outstanding student in the field of insurance.

**ACADEMIC EXCELLENCE AWARD FOR THE DEPARTMENT OF MANAGEMENT** is presented annually to the B.B.A. graduate in Management of the past year with the highest scholastic achievement.

**ACADEMIC EXCELLENCE AWARD FOR THE DEPARTMENT OF MANAGEMENT INFORMATION SYSTEMS AND DECISION SCIENCES** is awarded to the B.B.A. graduate of the previous year with the highest scholastic achievement.

**OUTSTANDING UNDERGRADUATE MARKETING STUDENT** is presented to a graduating student with outstanding scholastic achievement and service to the department, University, and community.

**OUTSTANDING UNDERGRADUATE LOGISTICS/MARKETING MAJOR** is presented to a graduating student with outstanding scholastic achievement and service to the department, University, and community.

**OUTSTANDING UNDERGRADUATE MARKETING MANAGEMENT MAJOR** is presented to a graduating student with outstanding scholastic achievement and service to the department, University, and community.

**OUTSTANDING UNDERGRADUATE SALES MAJOR** is presented to a graduating student with outstanding scholastic achievement and service to the department, University, and community.

**CRAWFORD DELTA SIGMA PI AWARD** is awarded annually to an outstanding pledge member of the Delta Sigma Pi Fraternity who has demonstrated creative leadership skills and outstanding scholastic ability.

**DELTA SIGMA PI**, international business fraternity annually awards a scholarship key to the student in The Fogelman College of Business and Economics graduating with the highest academic average in business.

**THE UNION PLANTERS/U of M FOGELMAN COLLEGE ALUMNI CHAPTER SCHOLASTIC ACHIEVEMENT AWARDS** are awarded each semester to three graduating seniors in recognition of their outstanding scholastic achievement in the college. Award includes a check and their names inscribed on a plaque.

## THE COLLEGE OF COMMUNICATION AND FINE ARTS

**DEAN'S ACADEMIC ACHIEVEMENT AWARD** is available to a student majoring in a discipline within the College of Communication and Fine Arts. It recognizes the graduating student with the highest grade point average.

**DEAN'S CREATIVE ACHIEVEMENT AWARD** is based on outstanding creative activity in the areas encompassed by the College of Communication and Fine Arts.

**CREATIVE ACHIEVEMENT IN ART** is awarded annually by the Art Department for outstanding creative achievement in art to a senior majoring in Art. A minimum cumulative GPA of 3.0 is required.

**"BEST OF SHOW AWARD" JURIED STUDENT EXHIBITION** is awarded annually to the student whose work is judged "Best of Show" in the Annual Juried Student Exhibition.

**THESIS AWARD IN ART HISTORY** is presented in recognition of an outstanding masters thesis in Art History.

**ART HISTORY GRADUATE AWARD** is presented annually to a graduate student for outstanding initiative and research.

**ART HISTORY UNDERGRADUATE AWARD** is presented annually to an undergraduate student for outstanding work in Art History.

**INTERIOR DESIGN ALUMNI STUDENT DESIGN AWARDS** at the sophomore, junior, and senior levels are given for the best design of a given project.

**SOCIETY OF PROFESSIONAL JOURNALISTS**, Memphis Chapter, annually presents a certificate of achievement and a cash award to the student chosen as outstanding in the field of Journalism.

**SOCIETY OF PROFESSIONAL JOURNALISTS, SIGMA DELTA CHI MARK OF EXCELLENCE AWARDS**, Arkansas, Louisiana, Mississippi, West Tennessee Region, annually presents first place awards for Best TV Broadcasting, Best Editorial Cartoon, Best Feature Article, and Best Photography Feature.

**SIGMA ALPHA IOTA COLLEGE HONOR AWARD** is an award based on musicianship, scholarship, and general contribution to the collegiate chapter.

**SIGMA ALPHA IOTA HONOR CERTIFICATE** is presented annually to the graduating senior of this chapter having attained the highest academic average.

**PAUL EAHEART MEMPHIS WOODWIND QUINTET SCHOLARSHIP** is presented in honor of Paul Eaheart for excellence in wind performance.

**LUBRANI CLARINET AWARD**, in memory of Professor Frederic Lubrani, is presented for clarinet performance ability, general scholarship, service to the Rudi E. Scheidt School of Music, and potential in the profession.

**SMIT COMPOSITION AWARD** is presented in memory of Professor Johannes Smit for excellence in composition.

**HEARST AWARDS** are presented as the result of an annual national Writing, Broadcasting, and Photography competition among accredited journalism programs for work appearing in student publications. Cash prizes range from $200 to $2,000 with matching awards going to sponsoring journalism departments.

**HOHENBERG FOUNDATION, INC. DANCE AWARD** is presented annually to a student pursuing a Bachelor of Fine Arts degree with a concentration in Dance. The recipient must have a minimum 2.5 GPA.

**ART CENTER SUPPLY AWARD** is given annually to a sophomore, junior, or senior majoring in Graphic Design. Selection is based on portfolio and academic performance.

**MEMPHIS-GERMANTOWN ART LEAGUE AWARD** is presented annually in the spring to an undergraduate Art major who has demonstrated exceptional artistic abilities in any discipline within the Department of Art.

**UNIVERSITY BOOKSTORE SUPPLY AWARD** is given annually to an undergraduate Art major. Selection is based on portfolio and academic performance.

**THE LINN SITLER THEATRE AWARD** is presented annually to an outstanding Theatre student with a minimum GPA of 3.0.

**THE SAUL BROWN AWARD** is given to a Journalism major concentrating in news writing. Saul Brown retired from the Memphis Press-Scimitar in 1980 as the newspaper's chief photographer. Selection for the award is based on talent, skill, and a student's promise as a journalist as demonstrated by his or her articles and/or photographs.

**THE KAPPA TAU ALPHA AWARD** is given to the member of Kappa Tau Alpha Journalism honor society who has achieved the highest academic average.

**THE MTNA STUDENT ACHEIVEMENT AWARD** is given by the Music Teachers National Association annually to a music student for excellence in studio teaching.

**THE RAYMOND LYNCH OBOE AWARD** established to recognize the distinguished career of the former oboe teacher and associate dean of the College of Communication and Fine Arts, Dr. Raymond Lynch, is given annually to an outstanding oboist.

**THE HAROLD STREIBICH AWARD**, established in memory of Att. Harold Streibich recognizes an outstanding Music Business student.

**BELLE MELODIES SCHOLARSHIP AWARD** is sponsored by St. Mary's Episcopal School in support of a Recording Technology student.

**PHI KAPPA LAMBDA ACADEMIC ACHIEVEMENT AWARD** is presented to the senior music student with the highest GPA.

## THE COLLEGE OF EDUCATION

**ELEANOR MAE FERGUSON AWARD** is presented each year to the outstanding junior or senior woman Physical Education major who displays strong leadership, outstanding character, and high scholarship and who performs an active role in departmental and campus activities.

**RALPH HATLEY SR. AWARD** is presented to the outstanding junior or senior male Physical Education major who displays strong leadership, outstanding character, and high scholarship and who performs an active role in departmental and campus activities.

**THE DEPARTMENT OF HUMAN MOVEMENT SCIENCES AND EDUCATION OUTSTANDING SENIOR IN SPORT AND LEISURE STUDIES AWARD** is presented annually in recognition of meritorious scholarship, leadership and service to the University, the community and the profession.

**THE DEPARTMENT OF HUMAN MOVEMENT SCIENCES AND EDUCATION OUTSTANDING GRADUATE STUDENT AWARD** is presented annually in recognition of meritorious scholarship, leadership and service to the University, the community and the profession.

**THE DEPARTMENT OF HUMAN MOVEMENT SCIENCES AND EDUCATION OUTSTANDING SENIOR IN EXERCISE AND SPORT SCIENCE AWARD** is presented annually in recognition of meritorious scholarship, leadership and service to the University, the community, and the profession.

**THE DEPARTMENT OF INSTRUCTION AND CURRICULUM LEADERSHIP OUTSTANDING SENIOR AWARD** is presented annually to an outstanding senior majoring in Special Education and Rehabilitation who displays strong leadership, outstanding character and scholarship and takes an active role in departmental and campus activities.

**THE FRANK DYER, JR. KAPPA DELTA PI JUNIOR ACADEMIC ACHIEVEMENT AWARD** is presented annually to the junior having the highest grade point average.

**THE JOHN R. PETRY KAPPA DELTA PI SENIOR ACADEMIC ACHIEVEMENT AWARD** is presented annually to the senior having the highest grade point average.

**THE DEPARTMENT OF CONSUMER SCIENCE AND EDUCATION OUTSTANDING SENIOR AWARD** is presented each year to the graduating senior in the department with the highest academic average.

**THE MARQUITA L. IRLAND SCHOLARS AWARD** is presented annually to a graduate with outstanding contributions in the areas of leadership, service to the community, to the profession of family and consumer sciences, and scholarship.

**THE MEMPHIS EDUCATION ASSOCIATION AWARD** is presented each year to the graduating senior who, having graduated from the Memphis City Schools System and completed all college level work in a teacher education program at the University, has attained the highest grade point average of the students in this category.

**THE HEBER E. RUMBLE OUTSTANDING STUDENT TEACHER AWARD** is presented each year to the student whose performance in student teaching is judged to be the most outstanding.

**THE DEPARTMENT OF INSTRUCTION AND CURRICULUM LEADERSHIP OUTSTANDING EARLY CHILDHOOD MAJOR AWARD** is presented annually to the Early Childhood Education major who has demonstrated outstanding scholarship, involvement in professional organizations, and professional potential.

**THE DEPARTMENT OF INSTRUCTION AND CURRICULUM LEADERSHIP OUTSTANDING ELEMENTARY EDUCATION MAJOR AWARD** is presented annually to the Elementary Education major who has demonstrated outstanding scholarship, involvement in professional organizations, and professional potential.

**THE DEPARTMENT OF INSTRUCTION AND CURRICULUM LEADERSHIP OUTSTANDING MASTER'S DEGREE CANDIDATE AWARD** is presented to the master's candidate who has demonstrated outstanding scholarship, involvement in professional organizations, and professional integrity.

**THE DEAN'S AWARD** is presented annually on the basis of scholarship, professionalism, leadership, and service to the College of Education, the University, and/or professional organizations.

## THE HERFF COLLEGE OF ENGINEERING

**OUTSTANDING SENIOR AWARDS** in the College of Engineering are presented to the outstanding senior, based on scholarship, in each of the following departments: Electrical and Computer Engineering, Mechanical Engineering, and Engineering Technology.

**OUTSTANDING STUDENT MEMBER OF IEEE** is presented an award by The Institute of Electrical and Electronics Engineers, student chapter.

**THE THOMAS S. FRY AWARD** is presented annually to the graduating Civil Engineering student who has demonstrated outstanding academic achievement.

**THE T. S. WU DESIGN AWARD** is presented annually to the graduating Civil Engineering student who has demonstrated outstanding design capability throughout the curriculum.

**FRED H. KELLOGG AWARD** is presented annually to the student in Civil Engineering who demonstrates the greatest potential to excel in the professional practice of Civil Engineering.

**ASHRAE AWARD** is presented annually to the outstanding junior in Mechanical Engineering.

**ENGINEERING DEAN'S AWARD** is presented annually to the graduating student who has compiled the highest academic achievement in the college.

**ENGINEER-IN-TRAINING AWARD** is presented to the student who achieves the highest score on the Fundamentals of Engineering examination, which is the first step in becoming a registered engineer.

## SCHOOL OF NURSING

**HIGHEST ACADEMIC ACHIEVEMENT AWARD** is presented annually by The University of Memphis Nursing Alumni Association to the graduating senior in nursing who has the highest overall scholastic average.

**OUTSTANDING STUDENT AWARD** is presented annually to the graduating senior in Nursing who best demonstrates academic achievement, leadership and professionalism.

**OUTSTANDING FOUNDATIONS NURSING STUDENT AWARD** is presented annually to a student who has completed the Foundations of Nursing course and who demonstrated excellence in clinical competency in providing nursing care.

**OUTSTANDING ADULT HEALTH & PSYCHIATRIC/MENTAL HEALTH NURSING STUDENT AWARD** is presented annually to a student who has completed the Adult Health Nursing and Psychiatric/Mental Health Nursing courses and who demonstrated excellence in clinical competency in providing nursing care.

**OUTSTANDING MATERNAL/CHILD HEALTH NURSING STUDENT AWARD** is presented annually to a student who has completed the Nursing Care of the Expanding Family and Child Health Nursing courses and who demonstrated excellence in clinical competency in providing nursing care.

**OUTSTANDING ADVANCED ADULT HEALTH NURSING STUDENT AWARD** is presented annually to a student who has completed Advanced Adult Health Nursing course and who demonstrated excellence in clinical competency in providing nursing care.

**OUTSTANDING COMMUNITY HEALTH NURSING STUDENT AWARD** is presented annually to a student who has completed the Community Health Nursing course and who demonstrated excellence in clinical competency in providing nursing care.

## UNIVERSITY COLLEGE

**DISTINGUISHED SPECIAL PROJECT AWARD** is presented to each student whose special project has been judged outstanding by the Faculty Council of University College.

**FACULTY COUNCIL AWARD** is presented to the graduating senior, each commencement, who has earned the highest overall grade point average.

**DEAN'S AWARD FOR SPECIAL ACHIEVEMENT** is given to honor University College graduates who have demonstrated academic achievement, leadership, professional and/or social commitment, and determination to complete a baccalaureate program.

**ACADEMIC ACHIEVEMENT AWARD** is given to University College baccalaureate graduates who have demonstrated academic excellence and scholarly potential.

**ALMA BUCOVAZ AWARD FOR URBAN STUDIES IN THE UNIVERSITY COLLEGE** is presented to a junior or senior with an approved baccalaureate program that addresses urban problem and seeks to ameliorate urban needs.

**BORNBLUM JUDAIC STUDIES AWARD** is presented to students who have excelled in the study of Hebrew Language and/or Judaic Studies.

**THE LEGAL RESEARCH AWARD** is given annually to the paralegal student demonstrating exceptional mastery of the principles of legal research and writing.

**OUTSTANDING DISTANCE EDUCATION AWARDS** are presented each year to the students (one undergraduate and one graduate) who, while taking courses away from the main campus, have demonstrated unusual commitment and scholarly endeavor in the pursuit of continuing their education. Consideration for the award may include grade point average, unusual family commitment, service to peers, ability to balance scholarly pursuit with work, family, and community service, and unusual service to U of M or Extended Programs.

**OUTSTANDING PARALEGAL STUDENT AWARD** is presented to a student seeking a Bachelor of Professional Studies degree in Paralegal Services who has demonstrated academic achievement, leadership, professional and/or social commitment, and dedication to the paralegal profession and the university.

## DEPARTMENT OF AEROSPACE STUDIES

**THE PRESIDENT'S AWARD** is presented annually to the senior AFROTC cadet who has demonstrated outstanding attributes of leadership and high moral character. Selection is

made by AFROTC, with final approval by the University president.

**ARNOLD OF THE YEAR AWARD** is presented to the member of Arnold Air Society who has given the most in service to the campus and the community.

**THE RETIRED OFFICERS ASSOCIATION AWARD** is presented annually to an outstanding AS 300 cadet at each AFROTC unit who shows exceptional potential for military leadership.

**SOCIETY OF THE WAR OF 1812 AWARD** is presented annually to outstanding AS 200 cadets who encourage and demonstrate the ideals of Americanism.

**AIR FORCE ROTC VALOR AWARD** is presented annually to recognize valorous performance by cadets.

**LIEUTENANT GENERAL JOSEPH J. REDDEN AWARD** is presented annually to the highest ranked AFROTC pilot and navigator candidate in the order of merit.

**AIR FORCE ASSOCIATION AWARD** is presented annually to the most outstanding AS 300 cadet at each AFROTC unit.

**NATIONAL DEFENSE INDUSTRIAL ASSOCIATION AWARD** is presented annually to one outstanding AS 400 cadet at each unit.

**AMERICAN LEGION AWARD** is presented annually to recognize one AS 100, one AS 200, one AS 300, and one AS 400 cadet at each AFROTC unit for general military excellence.

**AMERICAN LEGION SCHOLARSHIP AWARD** is presented annually to recognize one AS 100, one AS 200, one AS 300, and one AS 400 cadet at each unit for scholastic achievement.

**AMERICAN VETERANS AWARD** is presented annually to recognize a qualified AFROTC cadet at each unit at the end of the first year of the 2-year or 4-year AFROTC program.

**MILITARY ORDER OF WORLD WARS MEDAL** is presented annually to recognize cadets who demonstrate an outstanding desire to serve AFROTC and the United States and who are considered most improved in the categories of military and scholastic excellence.

**NATIONAL DEFENSE TRANSPORTATION ASSOCIATION AWARD** is presented annually to recognize an outstanding AS 400 cadet at each AFROTC unit.

**RESERVE OFFICERS ASSOCIATION AWARD** is presented annually to recognize outstanding cadets (AS 400, AS 300, and AS 200) at each AFROTC unit.

**SONS OF THE AMERICAN REVOLUTION AWARD** is presented annually to recognize a qualified AFROTC cadet at each unit at the end of the first year of the 2-year or 4-year AFROTC program.

**VETERANS OF FOREIGN WARS AWARD** is presented annually to recognize an outstanding AS 100, 200, 300, or 400 cadet who is actively engaged in the AFROTC program and who possesses individual characteristics contributing to leadership.

**USAA SPIRIT AWARD** is presented annually to recognize the AFROTC student at each unit that best displays the traits and characteristics that embody the spirit of service to others.

**MILITARY ORDER OF THE PURPLE HEART** is presented annually to recognize the AFROTC student who excels academically and displays exceptional leadership traits.

**AIR FORCE ASSOCIATION'S W. RANDOLPH LOVELACE MEMORIAL AWARD** is presented annually to the most outstanding AS 400 Air Force Association Award winner from each AFROTC region.

**ARMED FORCES COMMUNICATIONS AND ELECTRONICS ASSOCIATION SCHOLARSHIP AWARD** is presented annually to assists outstanding and deserving cadets in the completion of their education in the fields of communications engineering, electrical engineering, mathematics, physics, computer technology, or intelligence systems (not business or Bachelor of Arts), be in need of financial assistance, and be enrolled in AFROTC.

**LEGION OF VALOR BRONZE CROSS FOR ACHIEVEMENT** is presented annually to one outstanding AS 300 (rising AS 400) cadet in each AFROTC region who has demonstrated excellence in military and academic performance.

**SOCIETY OF AMERICAN MILITARY ENGINEERS AWARD** is presented annually to outstanding AFROTC cadets in both the "next-to-last" and "last" year of an engineering course.

**UNITED SERVICES AUTOMOBILE ASSOCIATION SCHOLARSHIP AWARD** is presented annually to outstanding AS 200 and AS 300 cadets.

**THE ARMY AND AIR FORCE MUTUAL AID ASSOCIATION AFROTC SCHOLARSHIP** is presented annually to an outstanding AS 200 (rising AS 300) cadet from each region.

**ARMED FORCES INSURANCE SCHOLARSHIP AWARD** is presented annually to four outstanding non-AFROTC scholarship cadets who have excelled in academic and military disciplines.

**THE GUY PULLIAM LEADERSHIP AWARD** is presented annually to cadets who demonstrate a commitment to spiritual values and to the spiritual aspects of leadership. It is named in honor of an Air Force pilot who embodied the above qualities and who was killed while on a training mission in 1973.

**THE MAJOR JEANNE M. HOLM LEADERSHIP EXCELLENCE AWARD** is presented annually to the number one, graduating AS 400 cadet earning a Liberal Arts degree in each region.

**AIR FORCE ASSOCIATION OUTSTANDING CADET OF THE YEAR AWARD** is presented annually to the most outstanding AS 300 Air Force Association winner.

**AIR FORCE HISTORICAL FOUNDATION AWARD** is presented annually to recognize leadership, citizenship, and outstanding academic and military achievement.

**DAEDALIAN COLONEL CHARLES W. GETCHELL MEMORIAL SCHOLARSHIPS AND DAEDALIAN AIR FORCE ROTC SCHOLARSHIP** is presented annually to outstanding pilot candidates in the AFROTC program.

**WELLS FARGO WORLDWIDE MILITARY BANK SCHOLARSHIP** is presented annually to an outstanding AS 300 (rising AS 400) cadet.

**LT COL VIRGIL I. GRISSOM MEMORIAL SCHOLARSHIP AWARD** is presented annually to recognize outstanding academic and military achievement and reward individuals demonstrating potential for future outstanding contributions in the national interest and to the United States Air Force.

**PENTAGON FEDERAL CREDIT UNION SCHOLARSHIP AWARD** is presented annually to provide assistance to AS 300 cadets who have not received an Air Force ROTC scholarship (other than the POC Incentive Scholarship) and who are the children of active duty, retired, or deceased military members.

**THE LT JAY SMITH MEMORIAL SCHOLARSHIP AWARD AND THE UNITED STATES PLANNING ASSOCIATION & INDEPENDENT RESEARCH AGENCY SCHOLARSHIP AWARD** is presented annually to recognize outstanding AS 300 (rising AS 400) cadets.

**ARMED FORCES COMMUNICATIONS AND ELECTRONICS ASSOCIATION AWARD FOR DISTINGUISHED PERFORMANCE** is presented annually to the highest ranking

AFROTC 400 cadet majoring in electrical engineering or communications sciences (computer related).

**AIR FORCE CADET OFFICER MENTOR ACTION PROGRAM AWARD** is presented annually to recognize outstanding academic and military achievement and rewards an individual demonstrating potential in the national interest and to the United States Air Force.

## DEPARTMENT OF MILITARY SCIENCE

**SOLDIER'S MEDAL** is awarded to cadets who distinguish themselves by an act of heroism at advanced camp.

**ROTC MEDAL FOR HEROISM** is awarded to cadets who distinguish themselves by an act of heroism performed on or off campus.

**THE PRESIDENT'S AWARD** is presented annually to the U of M senior cadet who has demonstrated outstanding attributes of leadership and high moral character. Selection is made by the department chair with final approval by the University president.

**GEORGE C. MARSHALL ROTC AWARD** is presented annually to the U of M senior cadet who has demonstrated outstanding leadership and scholastic qualities.

**HUGHES TROPHY AWARD** is presented annually to the cadet who is recommended by the professor of military science and the dean as the most outstanding commissioned graduate based upon officer potential and academic leadership.

**PALLAS ATHENE AWARD** is presented annually to the most outstanding graduating female cadet.

**NATIONAL DEFENSE TRANSPORTATION ASSOCIATION AWARD** is presented annually to the most outstanding senior cadet who is recommended by the professor of military science and the dean as being in the top twenty five percent of the ROTC and academic class and who possesses an interest in the Transportation Corps.

**ARMED FORCES COMMUNICATIONS ELECTRONICS ASSOCIATION HONOR AWARD** is presented to a senior cadet majoring in Math, Chemistry, Physics, Engineering, or Photography who is active on campus or academically distinguished and has demonstrated outstanding qualities of military leadership and high moral character.

**ALDEN PATRIDGE COMMEMORATIVE AWARD** is presented to the top graduating Science or Engineering student in the Army ROTC program.

**DISTINGUISHED MILITARY STUDENT/GRADUATE AWARD** is presented annually to senior cadets who are in the upper third of the ROTC class and upper half of the University class who are active on campus, are outstanding leaders, and possess an aptitude for military service.

**DEPARTMENT OF THE ARMY SUPERIOR CADET DECORATION AWARD** is presented annually to outstanding junior and senior cadets who have demonstrated academic leader qualities in scholastic and related activities and officer potential, and who are in the top twenty five percent of their ROTC and academic class.

**AMERICAN LEGION GENERAL MILITARY EXCELLENCE AWARD** is presented annually to the outstanding cadet who has demonstrated qualities in military leadership, discipline, character, and citizenship, and is in the top twenty five percent of ROTC and academic class.

**AMERICAN LEGION SCHOLASTIC EXCELLENCE AWARD** is presented annually to the outstanding junior and senior cadets who have demonstrated qualities in leadership and actively participated in student activities. and who are in the top twenty five percent of their ROTC class and the top ten percent of their academic class.

**SOCIETY OF AMERICAN MILITARY ENGINEERS AWARD** is presented annually to the junior and senior cadets who are recommended by the professor of military science and the Dean as being in the top twenty five percent of the ROTC and academic class and the outstanding Engineering students of the year.

**ASSOCIATION OF THE UNITED STATES ARMY AWARD** is presented to the junior who contributes the most, through leadership, to advancing the standing of the Military Science Department while in the top twenty five percent of the ROTC class and top ten percent of the academic class.

**AMERICAN DEFENSE PREPAREDNESS AWARD** is presented annually to the junior cadet who demonstrated outstanding leader qualities and participated actively in campus activities, placed in the top twenty percent of the platoon at Advanced Camp, received a B or above in all ROTC classes, and is in the upper half of the academic class.

**ARMED FORCES COMMUNICATIONS ELECTRONICS ASSOCIATION SCHOLARSHIP AWARD** is presented to Basic Course students accepted to the Advanced Course who are of high moral character, in the top twenty five percent of their academic class, and in need of financial assistance in completing a degree in Electrical Engineering or Technical Photography.

**DAUGHTERS OF THE FOUNDERS AND PATRIOTS OF AMERICA AWARD** is presented annually to a freshman or sophomore cadet who is in the top twenty five percent of the ROTC class and has demonstrated excellence in history, the potential for good leadership, and related accomplishments reflecting the ideals of patriotism.

## DEPARTMENT OF NAVAL SCIENCE

**TRIDENT HONOR SOCIETY AWARD** is presented to outstanding Naval midshipmen who have demonstrated the highest caliber of academic excellence.

### NROTC AWARDS

**PRESIDENT'S AWARD** is presented annually by the University president to a graduating senior who demonstrates outstanding attributes of leadership and high moral character.

**NAVY LEAGUE OF MEMPHIS HONOR SWORD AWARD** is presented to the Naval Graduate selected as the one Midshipman of the graduating class who has consistently demonstrated the highest leadership ability throughout the program.

**RESERVE OFFICERS ASSOCIATION** is presented annually to the outstanding freshman, sophomore, junior, and senior who have demonstrated above average scholastic achievements, exceptional mastery of previous Naval Science courses, and superior potential for commissioned service.

**THE RETIRED OFFICERS ASSOCIATION AWARD** is presented to the outstanding junior who has demonstrated above average scholastic achievement, high moral character and exceptional potential for military leadership.

**AMERICAN DEFENSE PREPAREDNESS ASSOCIATION AWARD** is presented annually to an outstanding senior whose scholastic achievements are in the top half of the class and in the top one-fifth of NROTC enrollment at the University, who has shown active participation in athletics or campus activities and demonstrated outstanding leadership qualities.

**SOCIETY OF THE WAR OF 1812 AWARD** is presented annually to an outstanding sophomore whose scholastic average is within the upper quarter of the class, and who demonstrates the ideals of Americanism.

**SONS OF THE AMERICAN REVOLUTION MEDAL** is presented annually to an outstanding freshman who has demonstrated leadership, military bearing and all around excellence in NROTC program studies and activities.

**NATIONAL SOJOURNERS AWARD FOR AMERICANISM** is presented annually to a sophomore or junior who has demonstrated the ideals of Americanism, outstanding scholastic achievements and the potential to be an outstanding leader.

**AMERICAN LEGION ROTC GENERAL MILITARY EXCELLENCE AWARD** is presented annually to one freshman, sophomore, and junior, each of whose scholastic achievements are in the top quarter of the class and who have demonstrated outstanding qualities in military leadership, discipline, character and citizenship.

**AMERICAN LEGION ROTC SCHOLASTIC EXCELLENCE AWARD** is presented annually to a freshman, sophomore, junior, and senior, each of whose scholastic achievements are in the upper ten percent of the University and who have demonstrated high qualities of military leadership.

**MILITARY ORDER OF THE WORLD WARS MEDAL** is presented to a freshman, sophomore, junior, and senior who each have demonstrated marked improvement in military scholastic achievements.

**VETERANS OF FOREIGN WARS AWARD** is presented annually to a freshman, sophomore, junior and senior who each have demonstrated achievement and concentrated effort in Naval Science and academic subjects and demonstrated capability and diligence in the Naval ROTC program.

**DAUGHTERS OF THE AMERICAN REVOLUTION AWARD** is presented annually to a graduating senior whose scholastic achievements are in the top quarter of the class and who has demonstrated qualities of dependability, good character, adherence to military discipline, leadership ability and a fundamental and patriotic understanding of the importance of the ROTC program.

**DAUGHTERS OF THE AMERICAN REVOLUTION CERTIFICATE** is presented annually to a junior who best exemplifies the qualities of dependability, good character, adherence to military discipline, leadership ability and a fundamental and patriotic understanding of the importance of the ROTC program.

**DAUGHTERS OF FOUNDERS AND PATRIOTS OF AMERICA AWARD** is presented annually to an outstanding sophomore or freshman who demonstrates qualities of dependability, good character, discipline, leadership, and patriotism.

**MILITARY ORDER OF FOREIGN WARS MEDAL** is presented annually to an outstanding freshman, sophomore, and junior who each have demonstrated discipline, good character, and leadership ability.

**AMERICAN VETERANS OF WORLD WAR II, KOREA, AND VIETNAM MEDAL** is presented annually to an outstanding freshman with superior standing in military and academic subjects.

**NAVAL INSTITUTE LEADERSHIP AWARD** is presented annually to a graduating College Program student, Officer Candidate, and Marine Enlisted Commissioning and Education Program student who each have demonstrated outstanding potential for Naval leadership.

**GENERAL DYNAMICS AWARD** is presented annually to a Midshipman, Officer Candidate, and Marine Enlisted Commissioning and Education Program student who each have demonstrated outstanding leadership ability.

**ARMED FORCES COMMUNICATIONS AND ELECTRONIC ASSOCIATION AWARD** is presented to Midshipmen of good moral character, who are in the top fourth of their class, working toward a degree in electronics, communications, electrical engineering, mathematics, computer technology or intelligence systems, and who need financial assistance.

**ARMED FORCES COMMUNICATIONS AND ELECTRONIC ASSOCIATION HONOR CERTIFICATE** is presented annually to a junior who has demonstrated high achievement in leadership and in academics and is academically strong in electronics, communications, electrical engineering, mathematics, computer technology or intelligence systems.

**NAVAL SUBMARINE LEAGUE AWARD** is presented annually to the graduating senior who has demonstrated superior leadership ability and academic aptitude for entry into the Submarine Warfare Community.

**MARINE CORPS ASSOCIATION AWARD** is presented annually to the graduating Marine-option Midshipman or Marine who best exemplifies the leadership qualities and professionalism of a Marine officer.

**MARINER OF THE YEAR** is presented annually by the Naval Science Department to a member of the Mariners who has given most in service to the department, University, and community.

## SPECIAL AWARDS

**MARIA LEONARD SCHOLARSHIP AWARD** is presented annually by Alpha Lambda Delta, national scholastic honor society, to the senior member of the society with the highest academic average.

**GOLDEN KEY NATIONAL HONOR SOCIETY** presents annually two scholarships to junior and senior members of the local chapter who have excelled in scholarship, leadership and participation in activities.

**PHI KAPPA PHI SCHOLARSHIP AWARDS** are presented annually to five undergraduate and graduate members who demonstrate high scholastic ability and excellent leadership, who provide meaningful service to the University, and who will continue their studies at the University.

**THE DAVID A. COLLINS-OMICRON DELTA KAPPA LEADERSHIP SCHOLARSHIP AWARD** is presented to a member of the U of M Circle who will continue studies at the graduate level, who has shown responsible and effective leadership, who has made significant contributions to the student body, and who inspires and encourages others to use their leadership talents for the benefit of their peers.

**THE HONORS PROGRAM DIRECTOR'S AWARD** is presented to an honors student for outstanding academic performance in an honors curriculum.

**THE JIMMY CARTER PRESIDENTIAL AWARD FOR VOLUNTEERISM** is presented to that student who best exemplifies the spirit of volunteerism and action that helps alleviate human need.

**THE JOSEPH R. RILEY STUDENT SERVICE AWARD** is presented for outstanding service to the Honors Program and the Honors Student Association.

**THE SAMUEL T. BOSWELL STUDENT LEADERSHIP AWARD** is presented in recognition of outstanding leadership in campus issues and activities, example set for peers, the display of personal and political courage, and/or community involvement.

**ROSETTA I. MILLER AWARD** is presented to the outstanding woman student who has returned to college despite significant hardships.

**GREEK ALL-SING FOLLIES SCHOLARS MERIT AWARDS:** Scholarships of $250 each are awarded annually by the Interfraternity Council to the pledge/associate from the previous fall or spring semester who attained the highest grade point average, and to the fraternity member with the highest grade point average over the past two consecutive semesters.

**THE WOMEN'S PANHELLENIC COUNCIL** annually awards one $250 scholarship to the sorority member who has attained the highest scholastic average. In addition, a Pledge Scholarship in the amount of $250 is awarded to the fall semester pledge who attained the highest average for the semester.

**TWO PANHELLENIC COUNCIL** scholarships are awarded each spring to the PHC fraternity man and sorority woman who have obtained the highest cumulative grade point average for the previous year. Awards are in the amount of $250 each.

**WOMEN'S INTERCOLLEGIATE ATHLETICS SCHOLAR AWARD** is presented annually to the woman athlete who has maintained the highest grade point average while at the University.

**THE ELMA ROANE OUTSTANDING WOMAN ATHLETE AWARD** is presented to the junior or senior woman athlete who best exemplifies the following qualities: drive, enthusiasm, determination, concern for others, love for athletics, maturity, involvement in campus activities, and self discipline in all aspects of life.

**CAMPUS RECREATION AND INTRAMURALS AWARDS** are presented annually to the intramural Greek, intramural Independent Resident, Panhellenic Manager of the Year, and Outstanding Official of the Year who show leadership and interest in the intramural program.

# 3. Expenses

## University Fees and Charges

**GENERAL:** All University fees and charges are calculated and assessed consistent with policies and procedures of the Tennessee Board of Regents and The University of Memphis. Information in this *Bulletin* is intended to cover the situations that most students will encounter. However, the University may have additional policies and procedures by which fees and charges are implemented or that apply to unusual situations.

**The fee amounts indicated in this edition of the Bulletin are for the 2002-2003 academic year. A slight increase in enrollment fee rates is expected for the 2004 and 2005 academic years. Because of rapidly changing conditions, it may also be necessary to alter other student fee rates for the years covered by this publication.**

## Registration (Enrollment) Fees

The information in this section concerning registration fees is applicable only to students enrolled in the undergraduate colleges and departments of the University. Similar information for students in The Graduate School and The School of Law is available in the Bulletins of those schools.

### Fee Schedule (FY 2002-2003 Rates):

**RESIDENT (IN-STATE)**

| Hours | Maintenance | + | Activity | = | Total |
|---|---|---|---|---|---|
| 1 | 170 | + | 6 | = | 176 |
| 2 | 340 | + | 12 | = | 352 |
| 3 | 510 | + | 18 | = | 528 |
| 4 | 680 | + | 24 | = | 704 |
| 5 | 850 | + | 30 | = | 880 |
| 6 | 1046 | + | 44 | = | 1090 |
| 7 | 1175 | + | 44 | = | 1219 |
| 8 | 1304 | + | 44 | = | 1348 |
| 9 | 1433 | + | 44 | = | 1477 |
| 10 | 1562 | + | 44 | = | 1606 |
| 11 | 1691 | + | 44 | = | 1735 |
| 12 | 1808 | + | 44 | = | 1850 |

**NON-RESIDENT (OUT-OF-STATE)**

| Hours | Maintenance | + | Out-of-State | + | Activity | = | Total |
|---|---|---|---|---|---|---|---|
| 1 | 170 | + | 298 | + | 6 | = | 474 |
| 2 | 340 | + | 596 | + | 12 | = | 948 |
| 3 | 510 | + | 894 | + | 18 | = | 1422 |
| 4 | 680 | + | 1192 | + | 24 | = | 1896 |
| 5 | 850 | + | 1490 | + | 30 | = | 2370 |
| 6 | 1046 | + | 1788 | + | 44 | = | 2878 |
| 7 | 1175 | + | 2086 | + | 44 | = | 3305 |
| 8 | 1304 | + | 2384 | + | 44 | = | 3732 |
| 9 | 1433 | + | 2682 | + | 44 | = | 4159 |
| 10 | 1562 | + | 2980 | + | 44 | = | 4586 |
| 11 | 1691 | + | 3278 | + | 44 | = | 5013 |
| 12 | 1808 | + | 3577 | + | 44 | = | 5429 |

**LATE REGISTRATION FEE:** A late registration fee of $100, which is not included in the Fee Schedule above, will be assessed to each student who does not complete registration by the semester's first day of classes.

**LATE PAYMENT FEE:** A late payment fee of $100 will be assessed to each student who does not satisfy at least the initial installment amount of enrollment fees (50% of fees after all financial aid, scholarships and/or sponsorships have been applied for the fall or spring semesters; 100% of fees for summer sessions) by the deadline date noted at *http://tigerweb* (click on Fee Payment) and the student's registration is subject to cancellation.

**PAYMENT OF FEES AND DEBTS:** Registration (enrollment) fees may be paid by cash, check, money order, Visa/MasterCard/Discover, FINANCIAL AID/SCHOLARSHIP AWARD(S), or University TIGER FUND$ account. Fees may be paid as soon as the student registers for courses and are due by the fee payment deadline date noted at *http://tigerweb* (click on Fee Payment).

The University offers a deferred (installment) payment plan to assist students with the payment of enrollment fees for the Fall and Spring Semesters (Not available for Summer Terms). Please refer to *http://tigerweb* (click on Fee Payment) for complete information on the University's Deferred Payment Plan for enrollment fees.

*It is expected that a check or draft given to the University, for any reason, will be honored by the bank on which it is drawn. A check or draft dishonored by the bank on which it is drawn may be presented a second time at the discretion of the University. A $20.00 returned item fee will be assessed for any checks/drafts returned.*

*The privilege of making payments to the University by personal check and check cashing privileges will be revoked for any student who has had more than one returned check/draft within a twelve month period. The suspension of this privilege will be for a period of one year from the date the last item is redeemed.*

*A student will not be permitted to satisfy registration fees by check if any previous check in payment of registration fees has been returned.* ***Students on a "NO CHECK" status must be prepared to satisfy registration fees with cash, cashier's check, or by authorized credit card draft.***

**THE SUMMER SESSION:** The summer session consists of a PreSession term, two separate terms of approximately five weeks each, plus an extended term for specified courses. Enrollment fees for the summer sessions are determined solely on a semester hour basis. The 2002-03 semester hour charges are $170 for maintenance fees, $6 for student activity fees, and an additional $298 for out-of-state tuition.

**MAINTENANCE FEES:** Maintenance fees are assessed based on the course level and the number of hours enrolled. The maximum fees will be the graduate maximum ($2,207 during 2002-03 academic year), if a student is enrolled for any graduate level courses. Maintenance fee amounts quoted in the fee schedule above include the Debt Service and General Access Fee components.

**TUITION:** Students classified as out-of state residents by the Office of Admissions, using regulations provided by the Tennessee Board of Regents, pay the additional out-of-state tuition as indicated in the Fee Schedule above. Residency regulations of the TBR and information on appeals procedures are available in the Office of Admissions. RESIDENCY CLASSIFICATIONS MAY BE CHANGED ONLY BY THE OFFICE OF ADMISSIONS.

**STUDENT ACTIVITY FEE:** All students enrolled for one to five credit hours pay a part-time student activity fee of $6 per credit hour. All students enrolled for six or more credit hours pay a full-time student activity fee of $44. Students paying the full-time fee are entitled to admission to home athletic events, and certain health services, concerts, plays, and other student-sponsored activities and social events.

**APPLIED MUSIC FEE:** Certain music courses require an additional applied music fee of $50 per semester for each weekly one-half hour lesson. This fee is not included in the Fee Schedule above.

**BUSINESS COURSE FEE:** 3000 and 4000 level business courses require an additional $10 per credit hour. 6000-9000 level business courses require an additional $20 per credit hour.

**ENGINEERING COURSE FEE:** Undergraduate and graduate level engineering courses require an additional $20 per credit hour.

**REGENTS ONLINE DEGREE PROGRAM (RODP):** RODP students are not required to pay campus access, technology access fees, or campus student activity fees. These fees are all included in the RODP Online Course Fee. RODP students who attend campus activities may request to pay additional student activity fee.

Undergraduate In-State Per Credit Hour Cost For Regents Courses

| Hours | Maintenance | Online Course Fee | Total |
|---|---|---|---|
| 1 | 129 | 52 | 181 |
| 2 | 258 | 104 | 362 |
| 3 | 387 | 156 | 543 |

Undergraduate Out-of-State Per Credit Hour Cost For Regents Courses

| Hours | Maintenance | Online Course Fee | Total |
|---|---|---|---|
| 1 | 427 | 52 | 479 |
| 2 | 854 | 104 | 958 |
| 3 | 1281 | 156 | 1437 |

**MATERIALS FEES:** Certain courses such as Biology, Art and Nursing may require an additional materials fee of $10 - $75 per semester. This fee is not included in the Fee Schedule above.

**NURSING CLINICAL PRACTICUM FEE:** Certain nursing courses require an additional clinical practicum fee of $60 per semester. This fee is not included in the Fee Schedule above.

**CREDIT BY EXAMINATION:** The fee for taking an examination for credit is $60 minimum and an additional $15 for each hour in excess of three (3) per course. These fees are non-refundable and must be paid prior to the examination.

**FOREIGN LANGUAGE PLACEMENT EXAMINATION:** The fee for taking a foreign language placement exam is $160 minimum and an additional $15 for each hour in excess of three (3) per course. These fees are non-refundable and must be paid prior to the examination.

**INDEBTEDNESS TO UNIVERSITY:** Policy of the Tennessee Board of Regents prohibits the enrollment of any person who owes the University any amount of money. All outstanding financial obligations to the University must be satisfied before a student will be allowed to register for courses. Tennessee law prohibits the release of grades, transcripts or diplomas of any person having outstanding financial obligations to the University.

**REFUND OF REGISTRATION (ENROLLMENT) FEES:** The University adheres to State of Tennessee Policy on the refund of student enrollment fees. As such, the following refund percentages of enrollment fees (Maintenance, Out-Of-State Tuition, Materials, Applied Music, Nursing Clinical Practicum, Business, Engineering, and other course fees, and Student Activity Fees) apply to students who withdraw from the University or who drop to an hourly load below full time:

A. **100% Refund:** (1) A full (100%) refund of these fees will be provided until the semester's first day of classes, (2) for courses canceled by the University, and (3) in the case of the death of the student during the semester.

B. **75% Refund:** A 75% refund will be provided beginning with the semester's first day of classes and extending for a period of time as noted at *http://tigerweb* (click on Fee Payment).

C. **25% Refund:** A 25% refund will be provided beginning at the expiration of the 75% refund period and extending for a period of time as noted at *http://tigerweb* (click on Fee Payment).

D. At the conclusion of the 25% refund period, *there will be no refund of these fees.*

E. Students who receive Federal Title IV Funds and who withdraw from the University may be eligible for a refund of enrollment fees based on the Federal pro-rata refund calculation. Please refer to the Student Aid section of this publication for specific information on pro-rata refunds and the return of Federal Title IV funds.

## Other Registration (Enrollment) Fee Information

**RESIDENCY CLASSIFICATION:** All determinations concerning the classification of students as in state or out of state for fee purposes are made in the Office of Admissions. The determinations are based on the regulations and guidelines of the Tennessee Board of Regents. If, for any reason, there is a question about a student's residency classification for fee payment purposes, the student is responsible for requesting a review of their residency status before classes begin.

**ACADEMIC COMMON MARKET:** Participation in the Academic Common Market allows qualified students from southern states to pay in-state tuition while pursuing certain degree programs at The University of Memphis. This arrangement is available only for students whose home states do not offer the designated program. The state in which the student *resides* determines which of the programs offered by The University of Memphis the home state will make available to its students.

The Academic Common Market is sponsored by the Southern Regional Education Board (SREB). Participating states are Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia (Florida and Texas grant access for graduate level programs only). Current SREB common market guidelines and require-

ments may be found on the web at *www.people.memphis.edu/~acadafflib/acm.html.*

Students may request through their home state coordinators that additional programs be made accessible. A list of the state coordinators with their addresses and telephone numbers may be obtained from the Office of Curriculum Planning.

In addition to certification requirements which the student's state of residence may specify, the following pertain: (1) students must be fully admitted to a degree program that has been approved as an Academic Common Market program (nondegree students are ineligible); (2) students must obtain a letter certifying residency, term of entry and approval for the particular The University of Memphis program from their state's Academic Common Market coordinator.

**NOTE:** After enrollment, students remain eligible for in-state tuition only so long as they are continuously enrolled—consecutive fall and spring terms—in the *same* major for which they were originally certified. If students change major, they must process a *Change of Major* through their advisor and notify the Office of Admissions to change the Academic Common Market residency code on their records. **Failure to process the Change of Major and to notify Office of Admissions may subject the student to out-of-state fees for all subsequent terms of enrollment in classes for a major other than the one for which the student received ACM certification.** Missing a fall or spring term of enrollment or a change of major requires that the student be recertified through the ACM coordinator in the student's state or residence.

**FEES FOR TOTALLY DISABLED PERSONS AND PERSONS OVER 60 YEARS OF AGE:** Persons who are domiciled in Tennessee and (1) have a permanent disability that totally incapacitates them from the potential to work at an occupation that brings them an income, or (2) who will become 60 years of age or older during the academic semester in which they begin classes, may AUDIT courses at The University of Memphis without paying tuition charges, maintenance fees, student activity fees, access fees, or registration fees. Admission to AUDIT will be limited on an individual classroom basis according to space availability.

Those who are totally disabled and those who will become 65 years of age or older during the academic semester in which they begin classes, and who are domiciled in Tennessee, may enroll for courses for credit at the cost of one-half the normal per credit hour fee, not to exceed $75 per semester.

Direct inquiries regarding these programs may be addressed to Registration Service, Wilder Tower, room 003.

## Miscellaneous Fees

**APPLICATION FEE:** Students submitting an application for admission to the University must pay, at the time of submitting their first application, a one-time, nonrefundable fee of $15.

**MUSIC INDUSTRY FEES:** Students who wish to apply for credit for experiential learning in Music Industry may obtain guidelines for this procedure from the Dean of the College of Communication and Fine Arts. A non-refundable $25 contract advising fee will be charged for the assessment of the portfolio. See "Experiential Learning Credit Fees" for related fee information.

**CREDIT BY EXAMINATION OR PLACEMENT EXAMINATION:** The fee for taking an examination for credit or a placement examination is $60 minimum and an additional $15 for each hour in excess of three (3) per course. These fees are non-refundable and must be paid prior to the examination.

**EXPERIENTIAL LEARNING CREDIT FEES:** Students who apply for credit for experiential learning will pay a fee of $30 per credit hour for which credit is awarded. For students enrolled under a *group contract*, a maximum fee of $180 will be assessed for credits assigned under the terms of the contract.

Currently the University College and the College of Communication and Fine Arts award credit for experiential learning. See "University College Fees" and "Music Industry Fees" for related fee information.

**MEALS:** The University cafeterias, student centers and vending areas, open to all students, provide wholesome food at reasonable prices. The cost of meals per student is estimated to be $3,400 per academic year.

**MUSIC LOCKER RENTAL:** Music students are required to have a locker for storage of University-owned musical instruments or equipment. Personal instruments may also be stored in the locker. A fee of $5 per semester is assessed for the locker rental. Students will be expected to pay for any damages.

**TRANSCRIPTS:** There is no fee for transcripts. Transcripts are issued only at the request of the student in person or by letter. No transcript will be issued for a student who has any unfulfilled obligations to the University.

**UNIVERSITY COLLEGE FEES:** In addition to the $15 application fee, students who apply to the University College must pay a $40 fee, which includes a $15 non-refundable screening fee plus a $25 contract/advising fee, refundable if the application is not accepted.

**VARIOUS COURSE FEES:** Certain other course offerings may require various fees to obtain the necessary course related supplies

**WALL LOCKERS:** University rental lockers are located in the following buildings: University Center (first floor), Engineering (first floor), and Jones Hall (basement and third floors). There is a $5 per semester fee for the rental of wall lockers. Wall locker fees are paid at the Bursar's Office (Wilder Tower, room 115). Wall lockers are assigned in room 208, University Center after wall locker fees have been paid.

The listing of any fee or incidental charge in this publication does not constitute a contract between the University and the student. As a condition of registration, each student will pay the fees in effect for the semester for which he or she registers. All questions in regard to fees, fee payment, refunds, and appeals should be directed to the Bursar's Office, room 115, Wilder Tower.

Fees are subject to change without notice. The University will usually collect the amount of fees due at the time of enrollment fees satisfaction in accordance with the residency classification and fee rates in effect. After all enrollments are complete, any over-collections will be refunded and students will be billed for any under-collections.

Fees for AUDITING courses are assessed on the same basis as fees for credit courses. Courses offered between terms, for concentrated periods during a term, or at specific locations may be subject to fees on a per-hour basis only.

## Appeal Procedures

**APPEALS OF UNIVERSITY FEES/CHARGES/REFUNDS:** Any individual may appeal the assessment, application, calculation, collection, or interpretation of any University fee, charge, deposit, or refund. The University has developed the following processes for an appeal:

**Traffic Fines/Citations:** Traffic fines and citations may be appealed through a separate process on forms available from the Parking Office, Office of Judicial Affairs, or the Student Government Association Office.

**Residence Life:** Appeals related to Residence Life financial matters should be filed first with the Office of Residence Life for processing. Decisions of the Office of Residence Life may be appealed in writing to the Office of the Assistant Vice President for Student Affairs and Dean of Students. This decision may be appealed to the University Fee/Refund Appeals Committee.

**All Other University Fees/Charges, Refunds, Etc.:** A written appeal of all other financial matters should be filed first on forms available from the Bursar's Office, room 115, Wilder Tower. The Bursar's office will provide a decision in writing to the appellant. Decisions of the Bursar's Office may be appealed in writing to the Office of the Assistant Vice President for Finance.

The Office of the Assistant Vice President for Finance will provide a decision in writing of those matters appealed to that office. This decision may be appealed to the University Fee/Refund Appeals Committee. The recommendation of the committee will be forwarded to the Vice President for Business and Finance for a final decision, which will conclude the University's appeal process.

## University ID Cards

The University of Memphis issues each student an identification card that bears the student's image and social security number. All students should obtain this permanent identification card that is used as the primary campus-wide method of determining privileges and accesses permitted each student. The ID card is required for the borrowing of library books, admission to or approval to pick up or purchase student tickets to athletic and social events, the sale of used textbooks, and other official purposes.

There is **no charge** to the student for the initial University ID card and it is automatically validated each semester the student enrolls. The card remains the property of The University of Memphis and should be surrendered upon the request of any University official. Each student may possess only **ONE** University ID card at any time.

Students may obtain a replacement for a lost, stolen, or damaged University ID card from the ID Card Office in room 115, Wilder Tower, between the hours of 7:30 a.m. and 6:00 p.m., Monday through Thursday, and 7:30 a.m.-4:30 p.m. Friday. Students will be charged a $10 fee to replace a card that has been lost or stolen. A charge of $2 will be made to change any data on an ID card.

## Tiger Fund$

A personal **TIGER FUND$** account, which is accessed through the University ID card, is available to all students at The University of Memphis. **TIGER FUND$** is a declining balance money management program that provides students with a convenient way to obtain supplies and services on campus without the need to carry cash or the inconvenience of paying by check or credit card.

**TIGER FUND$** is accepted at numerous campus locations including the University Store, Health Center, and campus food service locations.

Additional information on the advantages and convenience of having a personal **TIGER FUND$** account may be obtained from the ID Card Office in room 115, Wilder Tower.

## Student Housing

**RESIDENCE HALLS:** Charges for rooms in University residence halls are indicated below.

APPLICATION PROCEDURES: Applications for residence hall space may be obtained from the Office of Residence Life, U of M, Memphis, TN 38152. Because spaces are allocated by date of receipt and home address, completed applications accompanied by the required $100 application/reservation deposit should be returned to the Office of Residence Life as soon as possible. Checks or money orders should be made payable to The University of Memphis; please do not send cash.

Receipt by the Office of Residence Life of the housing application and $100 check or money order, however, does not guarantee admission to the University or to a residence hall. THE DIRECTOR OF RESIDENCE LIFE RESERVES THE RIGHT TO REFUSE ANY HOUSING APPLICATION, TO CHANGE OR CANCEL ANY ASSIGNMENT, OR TO TERMINATE A RESIDENT'S OCCUPANCY, FOR JUSTIFIABLE CAUSE.

*CONTRACT PERIOD AND CONDITIONS:* Fall assignments/contracts are for the full academic year (fall and spring semesters). Fall residents wishing to petition for release from their contract for the spring semester must do so in writing by November 1. Residents who cancel after this date, but before claiming their key for the spring semester, will forfeit 50% of their application/reservation deposit. Residents who fail to cancel by the completion of check-in will forfeit the entire deposit. The application/reservation deposit, once submitted with the application, covers the student's initial term of occupancy and all subsequent terms of occupancy and continues until such time as it is canceled in writing. There will be no penalty if written cancellation is received before the published deadline for any specific contract period.

Residents claim and vacate their rooms according to directions issued by the Office of Residence Life. Returning and new residents will have claimed their spaces if any or all of the following procedures have occurred: (1) receiving the room key during the check-in period, (2) paying residence hall rent in full or in part by the last day of regular check-in, (3) returning the signed contract with the rent payment.

*CANCELLATION POLICY:* Full application/reservation deposit and pre-payment of rent will be refunded if: (1) the institution is notified in writing by the following cancellation deadlines for the first semester in which the contract is in force: July 1-fall residents; December 1-new spring residents; May 1-summer residents; (2) the student is prevented from entering the University because of personal medical reasons confirmed in writing by a licensed physician, (3) residence hall space is not available, (4) the applicant has not been assigned to a room at the time the applicant's written cancellation is received by Residence Life, or (5) the student is denied admittance or readmittance to the University. Full refund will be made in the case of death. Fall residents wishing to petition for release from their contract for the spring semester must do so in writing by November 1. NO REFUNDS WILL BE MADE FOR OTHER THAN THE ABOVE CONDITIONS.

Assigned residents who fail to cancel by the deadline referred to in (1) above but cancel by completion of check-in will forfeit 50% of their deposit. Assigned residents who fail to cancel by completion of check-in will forfeit their entire deposit. (This is applicable to both the fall and spring semesters.)

*REFUND OF RESIDENCE HALL RENT:* Refunds of residence hall rent after registration will be pro-rated on a weekly calendar basis when the student is forced to withdraw from the residence halls (1) because of personal medical reasons confirmed in writing by a licensed physician; or (2) at the request of the institution for other than disciplinary reasons. Full refund will be made in the case of death.

For reasons other than the above stated, the following procedure shall apply: 75% of rent will be refunded for withdrawal from the residence halls for a period of approximately 14 calendar days beginning with and inclusive of the first official day of classes or within an equivalent period for a short-term course; 25% of rent will be refunded following expiration of the 75% period, for a period of time extending approximately 25% of the time covered by the term. The periods during which refunds of 75% or 25% will be made are exactly the same as the periods during which the same refund percentages are made for maintenance fees. NO REFUNDS WILL BE MADE FOR OTHER THAN THE ABOVE CONDITIONS.

| Dormitory | Type Room | Semester Rate* |
|---|---|---|
| Rawls | Double | $1120 |
| | Single | 1635 |
| | Single w/o sink | 1415 |
| Richardson | Double | 1260 |
| | Single | 1785 |
| | Freshman First Experience (Includes double room, meal plan, and Tiger Fund$) | 2190 |
| Robison | Double | 1120 |
| | Single | 1635 |
| Smith | Double | 1120 |
| | Single | 1635 |
| West | Double | 1120 |
| | Single | 1635 |
| South | Double | 1252 |
| | Single | 1805 |
| Mynders | Double | 1050 |
| | Single (small) | 1425 |
| | Single (medium) | 1480 |
| | Single (large) | 1530 |
| | Single (private bath) | 1555 |
| Student Housing Complex | | |
| Apartment | | 1975 |
| Townhouse | | 2035 |

* Fees quoted are for the 2002-2003 Academic Year and are subject to change.

**STUDENT FAMILY HOUSING:** Student Family Housing is located on the South Campus approximately one mile from the main campus. Phase One consists of 56 one-bedroom townhouse apartments, 62 two-bedroom townhouse apartments, and 8 two-bedroom flats. All apartments are equipped with stove, refrigerator, garbage disposal, living room carpet, and venetian blinds. Electric central heat and air are also provided. An enclosed private patio is located to the rear of each apartment. The new Phase Two consists of 24 two-bedroom flats. These apartments are equipped with stove, frost-free refrigerator, garbage disposal, dishwasher, venetian blinds, thermal pane windows, hook-ups for stackable washers and dryers, and carpet in the living room and bedrooms. Gas central heat and air are also provided. Each apartment has a patio/balcony with a locking storage area. Four apartments are specifically designed for physically disabled students.

Application forms may be obtained from the Office of Residence Life. A $100 deposit is required when the application is submitted.

# 4. Academic Regulations

## Appeals

Students have the right to appeal decisions made by University officials in the implementation of University policy. If a student feels that individual circumstances warrant an appeal, the request for appeal must be filed in the University office responsible for the implementation of that policy or the office specified in the policy statement.

## Class Attendance

Class attendance may be used in computing grades at the discretion of the instructor. If attendance is to be used, a complete written statement of the instructor's policy detailing the weight of attendance in determining the final grade must be presented to all students present at the first and second meetings of the class.

Instructors will report to the Office of the Registrar all students who have not attended any class meetings during the **first two weeks** of classes (fall/spring) or the **first week** of classes (summer). These students will be sent a "Notice of Non-Attendance." Students accept both fee and grade liability at the time of registration. Students who do not attend classes are responsible for processing an official drop/withdrawal on TIGERWEB at *www.tigerweb.memphis.edu*. In order to avoid fee or grade liability, students must drop/withdraw prior to the first day of classes for the session in which the course is taught.

A student who is absent from the final examination without the permission of the teacher incurs a grade of "F" on the examination and may, depending on the weight of the examination in determining the final grade, incur a grade of "F" for the course.

Students who receive VA benefits or Title IV funds for enrollment fees are subject to cancellation of future awards and immediate repayment of these benefits if they stop attending whether or not they officially withdraw or drop a course. The last known date of attendance will be reported by the instructor. Students who stop attending will be assigned a grade of "F" in courses which do not reflect an official withdrawal.

## Adding and Dropping Courses

After the official registration period is over, students may make adjustments in their schedules through the process of adding and/or dropping courses. (For dates and times, see The University of Memphis homepage on the web at *http://www.memphis.edu)*. Courses dropped through the last day to add will not be shown on the student's permanent record. Courses dropped after the last day to add will be indicated on the record as withdrawal grades for those courses. A student may drop any course or courses up through the last day to drop specified in the University Calendar for that session. (See *www.enrollment.memphis.edu/registrar*.) Requests for exceptions must be made by the end of the next regular term following the term in which the grade was assigned, and normally only as part of a request for withdrawal from the University. Exceptions are made only by the dean in the college in which the student is earning a degree, or by the dean's designee, and only on the basis of such extenuating circumstances as serious personal illness and relocation because of employment. To stop attending a class without officially dropping the course incurs the grade of "F".

## Withdrawal From The University

Any student who wishes to officially withdraw from the University may do so on the web, or in person through the Office of the Registrar in Student and Faculty Services (Wilder Tower). *Failure to officially withdraw will result in grades of "F" for the courses in which the student is enrolled.*

NOTE: Withdrawal is not permitted beyond the last day to withdraw specified in the University Calendar for that term or session. Requests for exceptions must be made by the end of the next regular term following the term in which the grade was assigned. Exceptions are made to this policy only in cases of such extreme circumstances as serious personal illness and relocation because of employment. Withdrawal requests after the deadline should be filed in the dean's office of the student's major college or the Academic Counseling Unit for students with no declared major.

## Enrollment Transactions

Enrollment transactions include registration, adding and dropping courses, and withdrawing from the University. The official date shall be the date that the request is submitted to the Office of the Registrar, subject to the final review and approval of the Assistant Vice Provost for Enrollment Services. If the final review reveals any apparent violation of the University's academic regulations and/or contractual relationships between the University and the student, the Assistant Vice Provost for Enrollment Services has the authority to suspend the transaction pending joint review with the college dean, the department chair, and the student's academic advisor. If the joint review verifies the legitimacy of the transaction, the official date will be that originally established. If the joint review culminates in a finding that academic regulations and/or contractual relationships have been violated, the entire transaction may be permanently invalidated.

## Classification of Students

Classification of students is based on the number of college level credit hours earned as shown in the following table.

| Classification | Semester Hours |
|---|---|
| Freshman | 0-24 |
| Sophomore | 25-54 |
| Junior | 55-84 |
| Senior | 85 or more |
| Special | Students not working on a degree |

In order to avoid a possible delay in graduation, students who have completed the required number of hours to be classified as juniors but who have not completed their basic requirements in the Lower Division should schedule these uncompleted requirements during the first semester in which such courses are available.

## Credit Hours and Maximum Load

The unit of credit at The University of Memphis is the semester hour. A semester hour is defined as the credit earned for the successful completion of one hour per week in class for one semester, or two to three hours per week of laboratory for one semester. (A course which gives three semester hours credit will normally meet for three lecture or recitation hours per week, or for two lecture or recitation hours and two to three laboratory hours per week; or for some other combination of these.) Each lecture hour presupposes a minimum of two hours preparation on the part of the student.

The minimum credit hour load for classification as a full-time student and the maximum loads are found in the table below. The maximum credit hour load includes all course enrollments for any term, both at The University of Memphis and any concurrent enrollment at other institutions. It does not include credit by examination. No student is permitted to enroll for correspondence or extension courses while carrying a maximum credit hour load.

## Academic Full-Time Classification and Maximum Load

| Term or Session | Minimum Hours | Maximum Hours |
|---|---|---|
| Fall or Spring | 12 | **20.5 |
| Pre Summer | | 7 |
| First or Second Summer | * | 9 |
| Extended Summer only | * | 16 |
| Session Combinations (including Pre) | * | *23 |

* Any enrollment of less than 12 hours for all summer sessions combined is defined as being less than full-time. The minimum number of hours required for full-time classification is 12 for any combination of Pre, First, Second, and/or Extended Sessions. Maximum hours are not to exceed individual session limits.

** Students must have approval from the appropriate official in their degree-granting college for hours in excess of the maximum.

**NOTE:** ID card validation of full-time for student activity purposes is based on a minimum of six credit hours per semester and does not necessarily constitute a full-time academic load.

## Academic Standards *(Grades and Quality Points)*

### Grades

At the end of each session, instructors report to the Office of the Registrar the standing of all students in their classes. The grade of a student in any course is determined by class standing and examination, combined in such proportion as the instructor in charge of the course may decide. The instructor's grading scale will be provided to students on the course syllabus.

The instructor's evaluation of the student's work is expressed by the following grades which are converted to quality points for the purpose of averaging grades.

| Grade | Quality Points |
|---|---|
| A+ | 4.00 |
| A | 4.00 |
| A– | 3.84 |
| B+ | 3.33 |
| B | 3.00 |
| B– | 2.67 |
| C+ | 2.33 |
| C | 2.00 |
| C– | 1.67 |
| D+ | 1.33 |
| D | 1.00 |
| F | 0.00 |
| W | 0 |
| I, Incomplete | 0 |
| NR, None reported | 0 |
| NC, No Credit | 0 |
| *IP, In Progress | 0 |
| *S, Satisfactory | 0 |
| *U, Unsatisfactory | 0 |
| T (see below) | 0 |
| AD, Audit | 0 |
| CR, Credit | 0 |

* Grades used to postpone or suspend course completion include "I" (Incomplete), "IP" (In Progress), and "W" (Withdrawn).

Independent studies courses, student teaching, workshops, practica, and internships should be graded "A-F, IP" or "S/U, IP." A grade of "S," "U," or "IP" does not carry any quality points and is not included in computing GPA. All courses for which the student is registered are recorded as passed (with a letter grade), "T", failed, dropped, withdrew, audit, credit, satisfactory, unsatisfactory, or incomplete. In no case is credit allowed in any course for which the student is not properly registered.

*Grade of Incomplete:* The grade of "I" (Incomplete) may be assigned by the faculty member in any course in which the student is unable to complete the work due to extraordinary events beyond the student's control that are acceptable to the faculty member. The "I" may not be used to extend the term for students who complete the course with an unsatisfactory grade. Unless the student completes the requirements for removal of "I" within 45 days from the end of the semester or summer session in which it was received (see University Calendar), the "I" will be changed to "F," whether or not the student is enrolled. The faculty member may grant up to a 45-day extension if sufficient extenuating circumstances exist. At the end of the extension period, the "I" will automatically revert to "F" if the student has not completed the requirements. The student will be certified for graduation only when all requirements are met, including the removal of "I" grades. For students who have an "I" in a course required to fulfill degree requirements in the semester in which they expect to graduate, the certification process and graduation will automatically be deferred to the next term.

*In Progress*: In courses with "In Progress" (IP) grading, faculty members may assign "IP" to extend the time permitted for completion of research or course requirements. A student

awarded an "IP" grade must re-enroll in the course for the same number of hours to complete the work. The final grade will be submitted by the faculty member at the end of the term in which the work is completed. This should be the semester following the "IP" grade.

*Grade Changes:* Grades properly issued in a course by the faculty member of record will not be altered except when an error was made in computation or reporting or as a result of a formal grade appeal. A grade other than "I" or "IP" may not be changed as a result of additional work after a grade has been submitted to the Office of the Registrar. The Grade Appeals procedure is described below.

*"T" Grade:* The "T" grade allows students to complete independent studies courses in variable time periods that might exceed a regular enrollment period. The following procedure governs the use of the "T" grade:

1. Prior to the registration period, the faculty member obtains approval of the department chair and dean to use the "T" grade in a course(s).
2. The dean notifies the Office of the Registrar of courses for which the "T" grade may be awarded.
3. At the end of the regular term, the faculty member has the following options:
   a. Award grades A-F.
   b. Award an "I" grade if the faculty member feels that the work can be completed in 45 days. (If an "I" grade is awarded, a roster with the student's name on it will be sent to the faculty member during the 45-day period. The faculty member must record either "A" to "F" for the "T" grade to prevent an automatic assignment of "F.")
   c. Award a "T" grade. If the "T" grade is awarded, the student must re-register for the course in order to earn credit. The "T" grade is not used in the computation of GPA.

### Grade Reports

Current semester grades may be obtained on TIGERWEB at *www.tigerweb.memphis.edu*,. Grades are normally available by the Thursday after the last day of the exam period for the session.

### Withholding of Grade Reports

The University is required by State law to withhold grade reports, transcripts and diplomas from students who have outstanding financial obligations to the University. When financial obligations have been resolved, students may obtain their grades on TIGERWEB at *www.tigerweb.memphis.edu*,.

### Repetition of Courses

A student may repeat most courses in an attempt to improve the grade previously earned. There are some courses that may not be repeated for this purpose. Information concerning these courses may be obtained from the office of the chair of the department in which the course is offered. In some degree and major programs, there are restrictions on course repetitions even after drops or withdrawals. The student should *always* check with the major advisor *before* enrolling in a course a second or subsequent time(s).

The University is not obligated to allow substitutes for repetition of courses, which have been deleted from the curriculum. Credit by examination may not be used for the purpose of improving a grade previously earned in a course taken for credit.

A student may not attempt the same course more than three times for the purpose of obtaining a passing grade or higher grade. Exceptions to this limitation may be made by the dean of the college from which the student intends to graduate, or by the dean's designee. These exceptions must be approved *prior* to the student's registration for the fourth and any subsequent attempts of the same course.

The student's grade point average will be computed as follows:

| Attempt | Grade(s) Included In Computation |
|---|---|
| 1st | Original grade earned |
| 2nd | Only grade in 2nd attempt |
| 3rd/+ | Grades earned in 2nd and all subsequent attempts calculated in grade point average. |

The record will continue to reflect all grades earned in the same course.

Courses repeated after a degree is awarded may not be used to replace grades earned prior to the awarding of the degree.

## Audit Courses

Students who are admitted to The University of Memphis may register to audit a course with the prior approval of the instructor and the department chair. Students enrolling on an audit basis do not receive academic credit for that course. Particularly in high-demand courses, departments should make sure that students who need these courses for degree credit can be accommodated before they issue permits for audits. Audits should not be used simply as a vehicle for obtaining access to laboratory or studio facilities.

Auditors are not required to take examinations and do not receive a regular letter grade. There should be a precise agreement between the student and the instructor as to the extent and nature of the student participation in the course, including class discussions, projects, and readings. Students auditing a course will receive "AD" (Audit) on the transcript only if they have attended regularly and participated according to the prior agreement with the instructor.

A student may not change from a grade point to an audit or from an audit to a grade point basis after the last day to add classes for that session. Any questions concerning this policy should be referred to the colleges.

Fees for audits will be assessed on the same basis as fees for credit courses.

## Credit/No-Credit Courses

The University, wishing to encourage mature students to broaden their range of interest without jeopardizing their grades, allows students who have earned at least 60 semester hours with a minimum grade point average of 3.0 to enroll in credit/no credit courses as determined by their college. Students are limited to one course per term and may not accumulate more than 12 semester hours on a credit/no-credit basis. (In most cases, Physical Activity courses are exempted from these requirements. See *Graduation from the University*.) Students who transfer from one college to another should be aware that credit/no-credit hours may be acceptable in one college and not in another. Students may apply to take, on a credit/no-credit basis, a course that has been taken previously for a grade. In every instance, approval to register for a course on a credit/no-credit basis must be obtained from the advisor and the dean of the student's degree-granting college. Credit hours earned on a credit/no-credit basis will be accepted toward degrees within the following limitations:

**The College of Arts and Sciences** accepts hours earned on a credit/no-credit basis in any course that is not required for the student's *degree*.

**The Fogelman College of Business and Economics** accepts hours earned on a credit/no-credit basis only in courses designated as electives in the student's *degree* program.

**The College of Communication and Fine Arts** accepts hours earned on a credit/no-credit basis in any course that is not required for the student's *major*.

**The College of Education** accepts hours earned on a credit/no-credit basis in any course that is not required for the student's *major, professional educational requirements and endorsement requirements.*

**The College of Engineering** accepts hours earned on a credit/no-credit basis in any course that is not specifically required for the student's *degree.*

**The University College** accepts hours earned on a credit/ no-credit basis in any course that is not required for a student's *Coordinated Study Program* or for the *Thematic Studies requirement.*

A student who registers for a course on a credit/no-credit basis may change the registration to a letter grade basis only during the add period, and a student who registers for a course on a letter grade basis may change the registration to a credit/no-credit basis only during the add period for the term or session of the course. The student who successfully completes a credit/no-credit course will receive the appropriate number of hours as credit toward graduation. These hours will not be used in the computation of the grade point average.

## Undergraduate Grade Appeals

### Purpose of the Undergraduate Grade Appeals Procedure

The responsibility for evaluating student work and assigning grades lies with the instructor of the course. The purpose of the grade appeal procedure is to provide a review process for a student to understand the reasons why the grade was assigned, the instructor to become aware of and correct possible errors, appropriate supervisors at the department and college level to review the basis on which a grade has been awarded, and to correct cases in which a grade is determined to have been assigned based on arbitrary or capricious action, or other reasons not related to academic performance. If, after departmental and college review, the grade is still in dispute, an appeal may be submitted to the Undergraduate Grade Appeals Committee, which consists of faculty and student representatives, for final resolution.

**In cases of a disputed grade, the student has burden of proof that the grade assigned was not appropriate. If the case has not been resolved at the student/instructor level, then the student should submit a written petition that would include a copy of the syllabus along with copies of any tests, quizzes, assignments or other written work completed and graded as part of the class requirements to the appropriate step of review. At each step of further review, copies of any previously submitted materials and any written responses to those petitions should be included.**

It is important to distinguish grounds for grade appeal from questions about quality of instruction. Successful grade appeals should be based on evidence that the student performed at a level sufficient to warrant a different grade. It is important for students to bring to the instructor's and the department's attention perceived deficiencies in instruction, but these by themselves do not normally warrant a change in grade. For a successful grade appeal, the student should be able to show, for example, not that the student could have earned a grade of "B" under different circumstances, but rather that the student actually did earn a grade of "B" according the standards set out on the syllabus for that course, but was assigned a lower grade. If, in the opinion, of the department or the college, deficiencies in instruction are so grave as to warrant an alternative accommodation, then the proper remedy will normally involve alternative assignments or examinations to allow the student the opportunity to demonstrate the appropriate level of competency in that area to earn a different grade than the grade originally assigned. The decision about these cases should be made at the departmental or college level. In disputed cases where the appeal is based primarily upon perceived quality of instruction, the Undergraduate Grade Appeals Committee has the option of referring the case directly to the Vice Provost for Academic Affairs to assign a remedy in consultation with the department, if the Committee agrees that a remedy is warranted in that case.

A student wishing to appeal a grade must follow Steps 1-4 listed below. (The deadlines listed below apply to the dates when classes are in session during the fall or spring semesters.) If a student fails to observe the deadlines, the decision made in the previous step will be final. If a department or college fails to respond to the student's complaint within the deadline, the student should contact the Office of Academic Affairs. The deadline for filing the appeal should be extended appropriately to ensure that the student retains the opportunity to pursue the appeal at the next step. All correspondence and records will be retained in the office in which the complaint is resolved.

**Step 1:** The student should first consult with the instructor, at the latest within two weeks of the beginning of the subsequent fall or spring semester, in an effort to provide a satisfactory resolution of the complaint. If the student cannot schedule a meeting with the instructor, the student may contact the department chair, who will schedule the meeting between the student and the instructor. The only exception to this step is the case in which the instructor is unavailable. In this case, the student may proceed directly to Step 2.

**Step 2:** If the complaint is not resolved in Step 1, the student may present the complaint in writing by the end of the third week in the semester to the chair of the department in which the course was offered. Included in the petition the student should attach the appropriate materials described above, and if available, the instructor's written explanation for the assigned grade. The department chair will attempt to resolve the complaint in consultation with the instructor and the student. The department chair will provide a written response to the student within two weeks from the time the written complaint has been received. If the department chair was the instructor of the course, the student may proceed directly to Step 3.

**Step 3:** If the complaint has not been resolved at the departmental level, the student may appeal further by presenting a written petition to the dean of the college in which the course was offered, along with a copy of the materials presented at the previous stage and any written responses received from the department. At the latest, this petition should be presented within one week after the departmental response. Within two weeks of the time the complaint was received, the dean may use any resources available to resolve the conflict.

If the dean finds that the request does not have merit, the dean shall notify the student in writing, with copies sent to the instructor and the department chair. If the dean and the department chair agree that the grade should be changed, the dean shall be empowered to change the grade without the instructor's consent. Either the student or the instructor may appeal this decision at Step 4. If the dean and the department chair do not agree, the dean shall present his or her view in writing to the student, with copies to the instructor and the department chair, so that the student may include that information in an appeal to

the Undergraduate Grade Appeals Committee for final resolution of the complaint.

**Step 4:** If the complaint has not been resolved at the previous steps, the student may present a grade appeal petition addressed directly to the Undergraduate Grade Appeals Committee through the Office of Academic Affairs. Copies of written materials and petitions presented at the previous steps, along with any written responses received from the department or the college, must be included with the petition at the time of submission. The deadline for submission of the petition is March 15 for grades awarded during the previous fall term, and October 15 for grades awarded during the previous spring or summer terms. The Office of Academic Affairs will forward the petition along with the attached materials to the chair of the Undergraduate Grade Appeals Committee who will distribute copies to the members of the Committee.

The Committee members shall review the petition and the attached materials and then forward their recommendation to the chair of the Committee about whether a hearing is warranted in this case. If a majority of the Committee does not vote that the case merits a hearing, the grade stands as issued. If a majority of the Committee votes in favor of a hearing, the chair of the Committee shall inform the student and the instructor, and shall arrange a hearing to be attended by the student, the instructor, and the members of the Undergraduate Grade Appeals Committee or their designated alternates. Copies of the Committee's decision for the hearing shall be sent to the department chair and dean of the college.

Prior to the hearing, the instructor should be given a copy of the student's petition and supporting materials. If members of the Committee feel that additional factual information is needed prior to or after the hearing to render a decision, the chair of the Committee should inform the Office of Academic Affairs of that request in writing, and that office should make every effort to provide that information in writing to the Committee. At the hearing, first the student and then the instructor will each have the opportunity to present their cases orally and to present any other written materials they deem appropriate. The Committee members shall have the opportunity to ask questions to both the student and instructor.

The chair of the Committee should inform the student, the instructor, the department chair, the college, and the Office of Academic Affairs of the Committee's decision in writing within one week of the hearing. If a majority of the Committee agrees that the grade should be changed, the Office of Academic Affairs will notify Student Records of the grade change. Otherwise the grade shall remain as recorded. **The decision of the Undergraduate Grade Appeals Committee shall be final.**

The Undergraduate Grade Appeals Committee shall be composed of seven members and seven alternates constituted as follows:

A chair designated by the Vice Provost for Academic Affairs, a faculty member and alternate designated by the dean of the college involved, two faculty members and two alternates designated by the Faculty Senate, one student and one alternate designated by the college, two students and two alternates selected through the Student Government Association.

Although the primary responsibility of the Committee is to review grade appeals and assign the appropriate grade in cases where the appeal is upheld, the Committee shall also report any findings of discrimination or prejudice to the Office of Academic Affairs for further consideration and possible action.

## Computing GPA

Computation of a student's college-level undergraduate grade point average includes all courses attempted except credit/no-credit, audit, incomplete, Transitional Academic Studies, and satisfactory/unsatisfactory courses and "T" grades. As an example: a student carrying five three semester-hour courses for a total of 15 semester hours earns the following grades: A, B, C, T, F, thus accumulating quality points in the amount of 12, 9, 6, 0, 0, for a total of 27. To compute the grade point average, the quality points (27) is divided by the number of quality hours (except "T" grade) (12) for an average of 2.25.

**Graduation:** A minimum 2.00 grade point average on all work attempted is required for graduation.

### Academic Fresh Start

An ACADEMIC FRESH START, allowing calculation of grade point average and credit hours toward graduation to be based only on work done after returning to college, is provided for undergraduate students who have gained maturity through extended experience outside higher education institutions and have demonstrated better than average academic performance following their return to The University of Memphis. Preliminary information and application forms may be obtained from the Academic Status and Retention Office. Requirements to be satisfied by a student requesting an Academic Fresh Start toward a baccalaureate degree are as follow:

1. Separation from all academic institutions for at least four years.
2. After returning to college and prior to application for ACADEMIC FRESH START, completion of at least 24 semester hours of college level earned graded course work, excluding developmental studies courses, at least six semester hours of which must have been successfully completed at The University of Memphis within one semester and may not include courses which do not count for degree credit.
3. At the time of application, GPA of at least 2.50 for all work attempted after returning to college.
4. Formal application to the dean of the student's college, requesting that an ACADEMIC FRESH START be granted and describing an academic plan which must include the declaration of a major.

Upon approval of the college dean, the student will be granted an Academic Fresh Start. It may be granted once. The student's permanent record will remain a record of all work; however, the student will forfeit the use for degree purposes at The University of Memphis, any college or University credit earned prior to the four-year separation indicated above. The date of the fresh start will coincide with the date of re-entry following prolonged separation, and the permanent record will note that a fresh start was made and the date of the fresh start. The record will also carry the notation, "GPA and credit totals are based only on work beginning with *that date.*" That date will be treated as the date of entry in determining which Bulletins may be used for graduation.

The University of Memphis honors academic fresh start completed at other accredited institutions of higher education.

## Academic Status and Retention

At The University of Memphis, students' academic status is denoted by one of three conditions:

(1) GOOD STANDING

(2) ACADEMIC PROBATION

(3) ACADEMIC SUSPENSION

Official notification of academic status is by means of the grade report available to each student at the end of the regular semester or summer session. Students can obtain their current semester grades/academic status on TIGERWEB, *www.tigerweb.memphis.edu*. Specific questions concerning aca-

demic probation/suspension should be directed to the Academic Status Office, Wilder Tower. The academic status of *probation* or *suspension* will be stated at the end of the report of grades. Policies and procedures related to each of these conditions are outlined in the following comments.

### Good Standing

Students are in good standing so long as their overall grade point average is equal to the minimum cumulative GPA required on the sliding retention scale as defined in this policy statement. The term *good standing* indicates only that students are meeting the minimum standard for retention in the University. However, in order to meet graduation requirements, students must have a cumulative GPA of 2.00.

## Academic Probation

A student will be placed on academic probation at the completion of any fall, spring, or summer term when the student's overall GPA falls below the following:

| QUALITY HOURS | MINIMUM GPA |
|---|---|
| 14.99 or less | No minimum |
| 15.00-29.99 | 1.40 |
| 30.00-50.99 | 1.70 |
| 51.00-67.99 | 1.90 |
| 68 and above | 2.00 |

A student on academic probation who withdraws from the University during the first probationary semester will be "continued on academic probation." Withdrawal by such a student from any subsequent probationary semester will be treated as an academic suspension requiring clearance from the Academic Status and Retention Office for any future registration. Students who are enrolled on academic probation are allowed to register for the following semester. However, students whose grades result in an academic suspension will be automatically withdrawn from the University before classes for that term begin. Students are considered in good standing and eligible to participate in extracurricular and organizational activities sponsored by the University while on probation unless other requirements are specified by a particular group, organization, or activity.

### Academic Suspension

Students on academic probation who, at the end of the following term of enrollment, fail to raise their GPAs to at least the required minimum on the Sliding Scale Retention Policy above will be suspended. There is one exception to this policy: students on academic probation will not be suspended at the end of any fall, spring, or summer term during which a term average of 2.00 has been earned.

(1) A student who incurs a first suspension must remain out of the University a **minimum** of one regular semester (fall or spring).

(2) A student who incurs a second suspension must remain out of the University a **minimum** of one calendar year.

(3) A student who incurs a third suspension must remain out of the University a **minimum** of three calendar years.

(4) A student who has been readmitted following a third suspension and who then fails to meet the retention standards is ineligible for further enrollment at The University of Memphis.

(5) Former University of Memphis undergraduate students on academic suspension will be readmitted under the retention policy in effect their last semester at The University of Memphis. A counseling interview will be required prior to re-enrollment. Academic status will be determined by the Academic Retention Policy in effect in the current University of Memphis *Undergraduate Bulletin*. Any course work attempted at another accredited college or university will be used in determining eligibility for readmission to The University of Memphis.

The Office of Academic Status and Retention, room , Wilder Tower, is responsible for the administration of this policy.

## Recognition for Academic Performance

The University of Memphis recognizes outstanding academic performance in a variety of ways. In addition to those listed below, there are other honors and awards listed in the descriptions of the various honors programs.

### The Dean's List

The Dean's List is composed of those students enrolled in the fall or spring semesters who meet *one* of the following criteria:

1. Completion of 6-8 graded hours in a semester with a semester grade point average of 4.00.
2. Completion of 9-11 graded hours in a semester with a semester grade point average of 3.66 minimum.
3. Completion of 12 or more graded hours in a semester with a semester grade point average of 3.50 minimum.

When a course is being repeated for the purpose of improving a grade previously earned, the student must meet one of the criteria for the Dean's List eligibility as described above for *each* of two separate sets of courses and grade point averages:

(a) The number of graded hours and grade point average for unrepeated courses taken during the semester.

and

(b) The total number of hours and overall term grade point average for *all* graded courses taken during the semester.

Transitional Academic Studies courses are not considered in calculating eligibility for the Dean's List. College level courses used to satisfy high school deficiencies will be considered in the computations to determine eligibility for the Dean's List.

### Graduation With Distinction

Students who intend to achieve *Graduation with Distinction* must do the following:

1. Fulfill all graduation requirements at The University of Memphis.
2. Complete a minimum of fifty (50) graded semester hours at The University of Memphis by the time of graduation.
3. Earn the following grade point average to achieve the listed designations:

| | |
|---|---|
| *3.250-3.499* | *Cum Laude* |
| *3.500-3.799* | *Magna cum Laude* |
| *3.800-4.000* | *Summa cum Laude* |

* Recognition of *Graduation with Distinction* at commencement ceremonies will be based on the completion of a minimum of forty-five (45) graded semester hours at The University of Memphis before the final semester of enrollment. In the final semester of enrollment, the student must be enrolled in a sufficient number of courses to complete the minimum of fifty (50) graded semester hours at The University of Memphis. The actual conferral of *Graduation with*

*Distinction* cannot be made until the student's final GPA at The University of Memphis has been certified by the College/School.

## Privacy Rights of Parents and Students

The Family Educational Rights and Privacy Act of 1974, with which the University complies fully, is designed to protect the privacy of educational records, to establish the right of students to inspect and review their educational records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with The Family Educational Rights and Privacy Act Office (FERPA) concerning alleged failures by the institution to comply with the Act.

The provisions for the release of information about students and the rights of students and others to have access to The University of Memphis education records are published in their entirety in The University of Memphis Procedure "Privacy of Education Records" which is available in the offices of the Registrar and the University Counsel and on the web at www.enrollment.memphis.edu/registrar.

## CREDIT TRANSFERRED FROM OTHER INSTITUTIONS

**1. Transfer Credit for Previous Instruction**

Credit from post-secondary institutions will be granted and applied toward degree requirements only when it is for courses that are substantially equivalent to those offered at The University of Memphis. Credit not equivalent to courses at The University of Memphis may be posted to the student's record and may be used as elective credit or as determined by the dean of the college from which the student is to graduate. After the student has been approved for admission as a regular undergraduate, the Office of Admissions will evaluate credit for University-wide use. The office of the dean in each college has the authority for determining the use of acceptable credit toward specific degree programs in that college.

The University of Memphis accepts transfers credit for college-level courses taken at accredited institutions of higher education. Student petitions for transfer credit for courses completed at institutions that are not regionally accredited are considered on a case-by-case basis. The student must present a petition in writing to the Office of Admissions at The University of Memphis with a list of courses for which credit is desired. The student must provide transcripts from the institutions, documentation from each course that includes the course content, the course level, contact minutes, the standards for assessing student work, and documentation of the academic credentials of the course instructor. Based on an examination of these materials and after consultation with the appropriate academic department or college, the Office of Admissions will review the student's petition and provide confirmation of those courses that have been approved for transfer credit.

**2. Earning Transfer Credit after Enrollment at The University of Memphis**

After enrollment as regular undergraduates at The University of Memphis, students should obtain prior approval from the dean of the college from which they are to graduate before taking a course at another institution for the purpose of meeting degree requirements at The University of Memphis. The student who intends to take a course at another institution should consult with the Office of Admissions and obtain forms for use in securing the dean's approval. Courses taken without prior approval are subject to possible disapproval when they are presented for evaluation at The University of Memphis.

Before credit earned at another institution can be transferred and recorded on a permanent academic record, the student must have an official transcript from the institution mailed to the Office of Admissions and must contact the college dean's office to request that the credit be posted.

The maximum credit hour load allowed for any term includes all course enrollments both at The University of Memphis and any concurrent enrollment at other institutions. (See "Credit Hours and Maximum Load")

**3. Transfer Credit for Distance Education**

Credit from other institutions for distance education courses taught by independent study, on-line computer instruction, or other methods, is evaluated in the same manner as transfer credit for classroom-based instruction. As with other transfer credit, students enrolled as regular undergraduates must seek prior approval from the dean of the college from which they are to graduate before taking courses to meet degree requirements at The University of Memphis.

## ADDITIONAL MEANS OF EARNING CREDIT

**1. Credit for Selected Secondary School Courses**

**a. Advanced Placement Credit**

The University of Memphis participates in the Advanced Placement Program of the College Entrance Examination Board. Appropriate credit is awarded for scores of 3, 4, or 5. Advanced placement credit may also apply to certain university requirements and to major requirements. Information about credit awarded may be obtained from the Office of Admissions.

**b. International Baccalaureate Program**

The University of Memphis recognizes secondary students' participation in the International Baccalaureate Program and awards college credit for completion of selected courses. To be eligible for credit, students must earn a score of 4 or higher. Information on credit awarded is available in the Office of Admissions.

**2. Credit for Instruction in the Armed Services**

An official evaluation of armed services instruction is made after a student is accepted as a regular undergraduate student. Credit awarded for completion of service schools will be governed by recommendations at the baccalaureate level from the current *Guide to the Evaluation of Educational Experience in the Armed Services*. DD Form 295 must be presented to the Office of Admissions for evaluation.

Veterans who have completed one year or more of continuous full-time active military service will receive a waiver of the required physical activity course, but will be required to take HMSE 1100 *Concepts of Fitness and Wellness*. Upon presentation of a copy of the veteran's report of separation (DD Form 214) to the Office of Admissions, six semester hours of health and physical education credit will be awarded. Veterans with less than one year of continuous full-time service who have completed basic training while on active duty will be awarded credit as recommended in the *Guide to the Evaluation of Educational Experiences in the Armed Forces*.

**3. Credit for Non-collegiate Sponsored Instruction**

Credit is awarded for non-collegiate sponsored instruction offered by corporations, associations, labor unions, government agencies, and training providers which has been

evaluated by the Program on Non-collegiate Sponsored Instruction of the American Council of Education and recommended in the current *Guide to Educational Programs in Non-collegiate Organizations*. The Office of Admissions should be contacted for information.

4. **Credit by Examination**

Credit by examination is awarded based upon standardized examinations and upon examinations administered by departments of the University for specific courses and for placement. Students may not take an examination for credit in a course previously taken for credit, with the exception of lower division transfer courses that the student wishes to validate for upper division credit. Students may, however, take an examination for credit in a course that was audited or in courses at a lower level than a course taken for credit. Credit by examination may not be used to satisfy the Computation Intensive, Writing Intensive, and Integrative requirements of the General Education Program.

**a. CLEP and DANTES Standardized Examinations**

The University of Memphis awards credit for standardized examinations of the College-Level Examination Program (CLEP) of the College Board and for standardized examinations of the Defense Activity for Non-Traditional Education Support (DANTES). Credit awarded is based upon credit recommendations and minimum scores recommended by the American Council on Education. CLEP and DANTES credit may also apply to certain University requirements and to major requirements. For information on credit awarded, test dates, and fees, contact the Testing Center.

**b. Departmental Examinations**

Almost all courses in the undergraduate curriculum, except for those with laboratory, research, or performance requirements, are available for credit by examination. Students who believe that they have already mastered the material of a particular course offered at The University of Memphis may take a departmentally administered examination for credit in that course.

To apply for credit by examination, a student must be enrolled at The University of Memphis and have a GPA of 2.00 or above. An eligibility form may be obtained in the Office of the Registrar – Corrections/Analysis. Permission to take a credit examination must be obtained from the chair of the department in which credit is sought and from the dean of the college in which the student is seeking a degree. Students pay $60 per course, plus $15 per credit hour in excess of three (3) credit hours per course (see Fee and Charges) prior to taking the exam. To receive credit, the student's examination grade should be the equivalent of a "C" or above. Credit is indicated on the student's record as CR.

5. **Upper Division Credit by Validation Examination**

Credit for courses at the freshman or sophomore level is transferred as lower division credit even though the content may be equated to University of Memphis upper division (junior/senior) level courses in some cases. In order to receive upper division credit for a lower division course that has an upper division equivalent, the credit must be validated through appropriate departmental examinations, portfolios, or other documentation. Contact the department to make application and to obtain information. There is no fee for validation examinations.

6. **Credit for Course Placement and Completion**

Some departments offer the opportunity to receive credit by course placement and completion for selected courses. Students who receive prior approval from the department chair may enroll in a University of Memphis course at the level for which they feel previous instruction or experience qualifies them. Upon completion of the course, they receive credit for certain sequential courses numbered lower than the one in which they enrolled. Recording of credit for the lower numbered course(s) is contingent upon completion of the higher level course with a minimum grade of "C". Upon completion of the course, approval of the chair of the department and payment of fees are required for credits to be recorded. (See Fees and Charges)

In the Department of Foreign Languages and Literature, students whose first college-level course in a language is 2010 may apply for credit for 1020 in that language. Students whose first college-level course is 2020 may apply for credit for 1020 and 2010 in that language, and those whose first college-level course in a language is a 3xxx course in composition and/or conversation may apply for credit for 1020, 2010, and 2020 in that language.

## Credit for Experiential Learning by Assessment

Students seeking degrees in the College of Communication and Fine Arts, the College of Education, and the University College may be granted credit for college level knowledge and understanding related to the student's major area of study and gained from work experience, life experience, or non-college instruction. The student who wants an assessment of such learning prepares a portfolio that describes and documents the learning. Portfolios are assessed by faculty who teach in that area.

Assessment by portfolio is reserved for knowledge and competencies which do not readily fit into the credit by examination procedures described above. More detailed information about procedures may be obtained from the individual colleges. For fee information, see Fees and Charges.

# 5. Graduation from the University

## General Requirements

Courses required for all baccalaureate degrees are outlined in the following section; specific requirements for the individual degrees are in the *Colleges and Degree Programs* section. Requirements for the Juris Doctorate degree are in the *Bulletin* of The School of Law; requirements for graduate degrees are in the *Bulletin* of The Graduate School.

The following have been established as minimum requirements by the University for all undergraduate degrees offered. **In addition, the student must meet the requirements for the specific degree as established by the college or department in which it is offered.** In some degrees and majors, the courses that may be used to meet the University General Education Program requirements below are specified. The assistance of an advisor for the particular degree and major must be sought to determine which courses will meet degree requirements.

### 1. UNIVERSITY GENERAL EDUCATION PROGRAM

*Room 200, Wilder Tower*

*http://www.memphis.edu/genedprog*

The University General Education Program promotes a shared core learning experience for all undergraduate students at The University of Memphis and provides a framework upon which the college major can build. The major purpose of the Program is to provide students the opportunity to acquire tools, develop skills, and awareness necessary for completing a college career and assuming the roles of a lifelong learner and an active, informed participant in contemporary society.

The University of Memphis General Education Program consists of 48-51 hours of coursework from a variety of disciplines. Students should consult their advisors on specific General Education Program courses that may be required for the major. The following are the General Education Program categories and their approved courses. Former course numbers appear in parentheses.

**A. English Composition** (6 hours)

| | | |
|---|---|---|
| ENGL | 1010 (1101) | English Composition<br>Expository writing, emphasizing content, organization, and style. |
| ENGL | 1020 (1102) | English Composition and Analysis<br>Expository writing, including library work and documented papers. |

[All candidates for graduation at The University of Memphis are required to complete English 1010 and 1020, or their equivalents, with a grade of "C" or better. Before enrolling in English 1010, a student must have either (1) an ACT English subscore of 19 or above, or (2) an SAT verbal score of 460 or above, or (3) a satisfactory score on a placement test administered by The University of Memphis Testing Center. Those who do not meet the requirements above, must successfully complete DSPW 0800 with a grade of "C" or better before proceeding to English 1010. English 1010 and 1020 must be taken in sequence; no credit will be allowed for English 1020 until 1010 has been completed successfully.]

**B. Oral Communication and Rhetoric** (3 hours)

| | | |
|---|---|---|
| COMM | 2381 | Oral Communication<br>Basic oral communication, includes speaking, critical listening, and decision-making. |

**C. Mathematics** (3-6 hours)

| | | |
|---|---|---|
| MATH | 1410-1420 (1181-1182) | Foundations of Mathematics I / II (6)<br>[This option requires satisfactory completion of both courses]<br>Logic, set theory, numeration systems, algebraic structures, statistics, mathematical proof, problem solving. |
| MATH | 1830 (1312) | Elementary Calculus (3)<br>An introductory course to calculus. |
| MATH | 1910 (1321) | Calculus I (4)<br>Calculus for the following majors: math, computer science, science, and engineering. |
| MATH | 2000 | Experiences in Mathematics (3)<br>Introduction to contemporary mathematics and its application to various areas of modern life. |

**D. Literary Heritage** (3 hours)

| | | |
|---|---|---|
| ENGL | 2201 | Literary Heritage<br>Major literary texts exemplifying narrative, lyric and dramatic modes of discourse. |
| ENGL | 2202 | Literary Heritage: African-American Emphasis |

**E. Fine Arts Heritage** (3 hours)

| | | |
|---|---|---|
| ART | 1030 (1101) | Introduction to Art<br>Fundamental principles of visual artistic expression as the basis for understanding Western and non-Western traditions. |
| COMM | 1851 | Introduction to Film<br>Film as a cultural, artistic, and social phenomenon. |
| DANC | 1151 | Introduction to Dance<br>Dance as an expressive art form, symbolic language, integral aspect of world cultures. |
| MUS | 1030 (MUHL 1101) | Music Appreciation<br>Music of various Western and non-Western cultures. |
| THEA | 1030 (1551) | Introduction to Theatre<br>Experiential, conceptual, historical, and cultural study of theatre. |

**F. Historical/Philosophical Heritage** (6 hours)

*Select 3 hours from Pre-1500 courses:*

| | | |
|---|---|---|
| CLAS | 2481 | Mythology<br>Thematic study of ancient myths. |
| HIST | 1110 (1301) | Development of World Civilization I<br>Traces civilization from ancient times to circa 1500. |
| PHIL | 1101 | Classical Issues in Philosophy<br>Introduction to philosophical thought, focusing on its emergence in the Classical period. |
| POLS | 1101 | Introduction to Ancient Political Thought<br>Fundamental questions of ancient political thought. |
| UNIV | 2850 | Religions of Abraham: Judaism, Christianity, Islam<br>Religious traditions arising from ancient Near East. |
| UNIV | 3580 | Hebrew and Greek Legacy<br>Interdisciplinary examination of major traditions of ancient Hebraic and Greek cultures. |

*Select 3 hours from Post-1500 courses:*

| | | |
|---|---|---|
| HIST | 1120 (1302) | Development of World Civilization II<br>Forms of civilization from 1500 to the present. |
| PHIL | 1102 | Values and the Modern World<br>The nature, development, and criticism of major philosophies of values. |

POLS 1102 Introduction to Modern Political Thought
Fundamental questions of modern political thought.

UNIV 3581 Faith, Reason and Imagination
Interdisciplinary examination of the religious, rationalist, and aesthetic viewpoints as distinctive ways of understanding.

**G. American Heritage** (6 hours)

HIST 2010 (2601) The United States to 1877
United States from discovery to end of political reconstruction.

HIST 2020 (2602) The United States Since 1877

*Thematic Courses: One of the following may be taken in lieu of either HIST 2010 or 2020:*

ANTH 3282 Cultural History of American Communities

GEOG 3401 Historical Geography of the United States

HIST 3863 Social and Intellectual History of the United States

HIST 2030 History of Tennessee

HIST 4851 History of Women in America

HIST 4881 African-American History

POLS 4212 Constitutional Law: The Origins and Evolution of Civil Liberties in the United States

POLS 4405 Origin and Development of American Political Thought

SOCI 3422 Racial and Ethnic Minorities

**H. Social Science** (6 hours)

*Global Perspective (One must be selected from this group):*

ANTH 1200 Cultural Anthropology
Origins and development of human culture throughout the world.

CJUS 2110 Comparative Criminal Justice Systems
Overview of criminal justice systems of various countries.

ECON 2110 Introduction to Macroeconomics
Nature and functions of the national economy in a global context.

GEOG 1301 Survey of World Regions
Survey of economic, cultural, and physical traits characteristic of developing and industrialized nations.

GEOG 1401 Introduction to Cultural Geography
Geographical aspects of human behavior.

POLS 1301 Governments of the World
Comparisons of political issues and systems in a variety of European, Asian, and African countries.

POLS 1501 International Relations
Conflict, competition, and cooperation among global factors in the world arena.

PSYC 3510 Deviance: Its Role in History and Culture
Defamation and glorification of concepts of deviance across cultures.

SOCI 2100 Sociology of International Development
Social change in an increasingly interdependent world.

SOCI 2101/CSED 2101 The Family in Global Perspective
Interdisciplinary overview of the family as a primary, global, social institution.

UNIV 2304 Gender and Society
Interdisciplinary study of gender as a social experience among different racial, ethnic, class, and cross-cultural groups.

*Non-Global Perspective (One may be selected from this group):*

ANTH 1100 Human Origins and Variations
Origins of humans and human society, behavior, and culture.

CJUS 1100 Introduction to Criminal Justice
Introduction to American criminal justice system: police, courts, and corrections.

ECON 2120 Introduction to Microeconomics
Operations of the market economy at the individual and firm level.

POLS 1100 American Government
Origins, structures, and processes of the American system of government.

PSYC 1200 General Psychology
Introduction to social aspects of psychology as a science of behavior.

SOCI 1111 An Introduction to Sociology
Concepts and methods of sociology, social structure, and social institutions.

**I. Natural Science** (8 hours - Sequence Required)

BIOL 1010/1011 (1071/1072) Introduction to Biology I / Lab
1020/1021 (1081/1082) Introduction to Biology II/Lab
A study of the biosphere and the structure, and functions of its plants and animals.

BIOL 1110/1111 (1151/1152) General Biology I / Lab
1120/1121 (1161/1162) General Biology II/Lab
Unifying principles of biology: Cell structure, cell function, heredity, origin and development of life.

CHEM 1010/1011 (1101) Intro to Chemistry I: General/Inorganic
1020/1021 (1102) Intro to Chemistry II: Organic/Biochemistry
Fundamental laws of chemistry and their impact on modern society. Lab included in the course.

CHEM 1110/1111 (1131/1121) General Chemistry I/General Chemistry I Lab
1120/1121 (1132/1122) General Chemistry II/General Chemistry II Lab
A basic course in chemistry.

GEOG 1010/1011 (1001/1011) Introduction to Environmental and Earth Science: Weather and Climate/Lab
1020/1021 (1002/1022) Introduction to Environmental and Earth Science: Landforms/Lab
The Earth and its atmosphere, including climate, oceans, landscapes, environmental hazards.

GEOL 1040-1050 (1101-1102) Physical and Historical Geology

GEOL 1040-1103 (1101-1103) Physical and Environmental Geology
Processes that operate within, on and impact the surface of the Earth. Lab included in the course.

PHYS 1010/1001 Introduction to Physics/Lab
1020/1002 Survey of Astronomy/Lab
Physics and astronomy for non-technical students; natural laws of motion, heat, sound, light, heavenly bodies.

PHYS 2110/2111 (2510/2003) Physics I for Science and Engineering – Calculus/ Physics I Lab
2120/2121 (2520/2004) Physics II for Science and Engineering – Calculus/ Physics II Lab
Calculus based physics.

UNIV 1610-1611 Natural Science I / II
Interdisciplinary approach to basic processes of physical and natural science. Lab included in the course.

**J. Fitness and Wellness** (4 hours)

HMSE 1100 Concepts of Fitness and Wellness (2)
Preventive health practices to promote healthful lifestyles and reduce risk factors. This is a lecture course to be taken in addition to physical activity.

Physical Activity Requirement (2)

Students are required to take a 2 hour physical activity course. The following courses will fulfill the physical activity portion of the Fitness and Wellness requirement: any 1000 level PHED activity course; DANC 1821 (Modern Dance I), 1825 (Ballet I), 1827 (Jazz Dance I), 2821 (Modern Dance II), 2825 (Ballet II), 2827 (Jazz Dance II); MUAP 2002 (Marching Band); THEA 2501 (3 hours, Stage Movement); AERO 1111, 1112, 2211, 2212; ARMY 2115/2120; NAVY 1100, 1104, 2204, 2206, 3000.

Any student except those with a major or minor in Physical Education or those seeking a B.B.A. degree has the option of taking the activity courses for a letter grade or on a credit/no credit basis. Most Physical Education courses can be appropriately adapted to enable students with disabilities to participate. If a student needs an adaptation, a modification of the course requirement, or is medically restricted from participating in physical activity, the student should contact Student Disabilities Services for assistance.

Students completing NAVY 1100, 1104, 2206, and 2204 or 3000 will satisfy the entire 4 hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115, and 4121).

**Skills Reinforcement and Integration** (9 hours)

The General Education Program specifies that all students must complete certain upper division courses – one in writing, one in computation, and one in the integration of knowledge and methodologies. These upper division hours are included in departmental requirements. The courses are designed especially for the General Education Program to reinforce writing and computation skills and to provide students the opportunity to think about connections between areas of study within or across disciplines.

*Writing Intensive* [W] (3 hours)

At least one upper division course designated as Writing Intensive and approved by advisor. **Prerequisite**: Satisfactory completion of General Education Program English Composition.

*Computation Intensive* [C] (3 hours)

At least one upper division course designated as Computation Intensive and approved by advisor. **Prerequisite**: Satisfactory completion of the General Education Program Mathematics requirement.

*Integrative* [I] (3 hours)

At least one upper division course designated as Integrative and approved by advisor. **Prerequisite**: Satisfactory completion of General Education Program English Composition, Oral Communication, and Mathematics requirements.

**NOTE:** Under most circumstances, transfer courses may not be used to satisfy the Writing Intensive, Computation Intensive, and Integrative requirements.

### 2. COMPUTER LITERACY

Students entering a post-secondary institution as beginning freshmen in Fall 1984 or later are required to possess competency in computer literacy before graduating. This requirement may be met by completing COMP 1200, by passing the UofM Computer Literacy Examination, by demonstrating competency as approved by the appropriate dean, or by satisfying the Computer Literacy Competency requirement at another TBR institution. A student who has satisfied the Computer Literacy Competency requirement in any college or school of the University has satisfied the University's requirement. This policy addresses the University's requirement only. Certain majors may require additional technical and media competencies.

### 3. GRADE POINT AVERAGE

To receive a bachelor's degree from any of the colleges in the University, students must have a minimum grade point average of 2.00 both overall and for courses taken at The University of Memphis.

### 4. RESIDENCE REQUIREMENTS

*A student will satisfy residence requirements for graduation by earning at least twenty-five (25) percent of credit hours required for the degree at The University of Memphis.* At least thirty-one (31) of the final sixty-two (62) hours required for the degree must be completed at The University of Memphis. A student transferring credits from a two-year college or institution must complete, as a requirement for the baccalaureate degree, a minimum of sixty semester hours in an accredited senior institution.

In addition, the student must meet the residence requirements for the specific degree as established by the college or school in which it is offered. Exceptions to residence requirements can be authorized by the appropriate dean. Residence requirements for specific degrees within each college or school may be found in the *Colleges, Degree Programs and Courses* section. For more details, the student should inquire in the office of the dean of the appropriate college or school.

### 5. TESTING AS A PREREQUISITE FOR GRADUATION

Any or all students may be required to take one or more tests designed to measure general education achievement and achievement in their major as a prerequisite to graduation, for the purpose of evaluation of academic programs. Unless otherwise provided for in any individual program, no minimum score or level of achievement is required for graduation. Participation in testing may be required for all students, for students in selected programs, and for students selected on a sample basis. Details concerning these regulations and the dates of the examinations will appear in the *Online Class Listings* each semester.

### 6. FILING FOR GRADUATION

All students are required to file an intention to graduate during the semester preceding the semester of graduation. The deadlines for this filing are included in the academic calendar in the *Online Class Listings*. It is the responsibility of the student to insure that this deadline is met.

## Requirements for Teacher Licensure

An undergraduate student can be recommended for licensure to teach in Elementary Education (Grades 1-8); Early Childhood Education (Grades PreK-4); or Special Education (Grades K-12); or Physical Education (Grades K-12) in the State of Tennessee by completing all degree requirements for that endorsement as outlined for the Bachelor of Science in Education in the COLLEGE OF EDUCATION DEGREE PROGRAMS section of this *Bulletin*.

A student in any of these programs must (1) file an application for admission to the Teacher Education Program in The College of Education; (2) fulfill the requirements and application procedures for the Internship/Student Teaching Program; (3) file an intent to graduate application before the University deadline; (4) have an overall GPA of no less than 2.50 and a grade of C or above in each required professional education course; (5) take the Core Battery and the Specialty area (if required) of the National Teacher Examinations (NTE); and (6) fulfill all other graduation requirements listed under the TEACHER EDUCATION PROGRAMS: REQUIREMENTS section.

Students entering the University for the first time as freshmen who wish to prepare for teaching careers in fields other than Elementary Education, Early Childhood Education, Spe-

cial Education, or Physical Education should see the academic advisor in the College of Education, room 204, Ball Hall.

Graduate, special, and transfer students who wish to obtain a teacher's license should confer with the academic advisor in the College of Education, room 204, Ball Hall, concerning their individual requirements.

## *Bulletin* Applicability

### Degree/Major

A student may complete the requirements for the initial degree under the provisions of any *valid* UofM *Bulletin* provided the effective date of that *Bulletin* is not earlier than the student's initial admission to UofM or some other accredited institution of higher learning. The degree requirements published in the *Undergraduate Bulletin of The University of Memphis* are valid for seven years from the beginning of the academic year to which the Bulletin applies. For students whose initial enrollment occurs Fall 2003-Summer 2004, this Bulletin is valid through Summer 2010.

With the approval of the dean of the college through which the student's degree is offered, any student who had completed at least fifteen semester hours of course work and whose progress was interrupted by a call to active military duty may extend the validity date for graduation for any Bulletin valid at the time of the call to active duty. Though the student should attempt to complete requirements within the normal seven-year validity period, the dean may grant an extension commensurate with actual time served on active military duty and time required for directly related medical treatment that prevents the student's re-enrollment. Qualification for this extension is contingent upon re-enrollment within a period of time deemed reasonable by the dean. The extension is not allowed for a full military career.

The seven-year *Bulletin* validity period applies *only* to degree requirements as specified in *Graduation from the University* and *Colleges, Degree Programs and Courses* sections of the *Bulletin*. It does not apply to regulations in the *Academic Regulations* section. Specific regulations apply for the year in which they appear in the *Bulletin*.

### Minor

Selection of a minor may be made from a valid *Bulletin* other than the one used for degree requirements unless the minor is restricted to a particular degree. Unrestricted minors may be selected from the same *Bulletin* as that used for degree requirements or from any *subsequent Bulletin*. Unrestricted minors approved too late for inclusion in the current *Bulletin* may also be selected. In the case of both restricted and unrestricted minors, the GPA required for the minor is that of the degree granting college in the Bulletin under which the student is graduating. Currently available minors are listed in each college with the corresponding major.

## Second Bachelor's Degree

All students who hold a baccalaureate degree from a regionally accredited institution of higher education, including The University of Memphis, may earn another bachelor's degree with a different title.

To earn the second bachelor's degree, the student must:

1. Complete any additional college requirements as determined by the office of the dean of the college granting the second baccalaureate degree.
2. Complete all requirements for the major as determined by the department in which the second baccalaureate degree is sought.
3. Complete a minimum of 30 semester hours in residence.
4. Complete the American history as required by Tennessee State Law.
5. Earn a minimum cumulative grade point average of 2.0 and a minimum GPA of 2.0 in all coursework taken at The University of Memphis.

## Second Major

Two majors in the same degree may be pursued simultaneously or subsequently. If a student completes the requirements from a valid *Bulletin* for an additional major for a degree previously earned at The University of Memphis, that major may be posted on the student's record *if the student applies for the additional major through the appropriate dean's office.*

# Academic Programs

Individual program requirements described in the *The University of Memphis 2003-2004 Bulletin* are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this *Bulletin*, or consult the Undergraduate *Bulletin* website at: *http://www.people.memphis.edu/~acadafflib/bulletin/bulletin.htmlx* for the latest updates.

| Major | Concentration Within Major | Degree Offered | Department | College | Page |
|---|---|---|---|---|---|
| *Accounting | | Bachelor of Business Administration (B.B.A.) | Accountancy | Business and Economics | 97 |
| *African and African American Studies | | Bachelor of Arts (B.A.) | Interdisciplinary Studies | Arts and Sciences | 69 |
| *Anthropology | | Bachelor of Arts (B.A.) | Anthropology | Arts and Sciences | 70 |
| Architecture | | Bachelor of Fine Arts (B.F.A.) | Art | Communication and Fine Arts | 111 |
| *Art | (1) Art Education<br>(2) Ceramics, Painting, Printmaking, Sculpture<br>(3) Graphic Design<br>(4) Interior Design<br>(5) Photography | Bachelor of Fine Arts (B.F.A.) | Art | Communication and Fine Arts | 111 |
| Art History | | Bachelor of Arts (B.A.) | Art | Communication and Fine Arts | 114 |
| *Biology | | Bachelor of Science (B.S.) | Biology | Arts and Sciences | 71 |
| *Business Economics | | Bachelor of Business Administration (B.B.A.) | Economics | Business and Economics | 98 |
| *Chemistry | | Bachelor of Science (B.S.)<br>Bachelor of Science in Chemistry (B.S.Ch.) | Chemistry | Arts and Sciences | 71 |
| Civil Engineering | (1) Construction Engineering<br>(2) Environmental Engineering<br>(3) Foundation Engineering<br>(4) Structural Engineering<br>(5) Transportation Engineering | Bachelor of Science in Civil Engineering (B.S.C.E.) | Civil Engineering | Engineering | 143 |
| *Communication | (1) Broadcast and Electronic Media<br>(2) Communication<br>(3) Film and Video Production | Bachelor of Arts (B.A.) | Communication | Communication and Fine Arts | 115 |
| Computer Engineering | | Bachelor of Science in Computer Engineering (B.S.C.P.) | Electrical and Computer Engineering | Engineering | 144 |

* Minor available.

| Major | Concentration Within Major | Degree Offered | Department | College | Page |
|---|---|---|---|---|---|
| *Computer Engineering Technology | | Bachelor of Science in Engineering Technology (B.S.E.T.) | Engineering Technology | Engineering | 145 |
| *Computer Science | | Bachelor of Science (B.S.) | Mathematical Sciences | Arts and Sciences | 73 |
| Consumer Science and Education | (1) Dietetics<br>(2) Family & Consumer Science Education<br>(3) Food Systems Management<br>(4) Merchandising—Fashion<br>(5) Merchandising—Home Furnishings | Bachelor of Science in Education (B.S.Ed.) | Consumer Science and Education | Education | 134 |
| *Criminology and Criminal Justice | | Bachelor of Arts (B.A.) | Criminology and Criminal Justice | Arts and Sciences | 74 |
| Economics | | Bachelor of Arts (B.A.) | Economics | Arts and Sciences | 74 |
| Electrical Engineering | (1) Computer Engineering<br>(2) Electrophysics<br>(3) Systems and Signals | Bachelor of Science in Electrical Engineering (B.S.E.E.) | Electrical Engineering | Engineering | 146 |
| *Electronics Engineering Technology | | Bachelor of Science in Engineering Technology (B.S.E.T.) | Engineering Technology | Engineering | 147 |
| *English | (1 Creative Writing<br>(2) English as a Second Language<br>(3) Language and Linguistics<br>(4) Literature<br>(5) Professional Writing | Bachelor of Arts (B.A.) | English | Arts and Sciences | 75 |
| Exercise and Sport Science | | Bachelor of Science in Education (B.S.Ed.) | Human Movement Sciences and Education | Education | 137 |
| *Finance | | Bachelor of Business Administration (B.B.A.) | Finance | Business and Economics | 99 |
| *Foreign Languages<br>*(With single language concentration from the first five or multiple language concentration from total list)* | (1) French<br>(2) German<br>(3) Greek<br>(4) Latin<br>(5) Spanish<br>(6) **Russian | Bachelor of Arts (B.A.) | Foreign Languages and Literatures | Arts and Sciences | 76 |
| *Geography | (1) Environmental and Earth Sciences<br>(2) Geographic Techniques<br>(3) Geography<br>(4) Urban Planning | Bachelor of Arts (B.A.)<br>Bachelor of Science (B.S.) | Earth Sciences | Arts and Sciences | 77 |
| *Geological Sciences | (1) Geology<br>(2) Geophysics | Bachelor of Science (B.S.) | Earth Sciences | Arts and Sciences | 79 |

* Minor available.

** A concentration in Russian requires a collateral foreign language concentration or a collateral major outside the Department of Foreign Languages and Literatures.

| Major | Concentration Within Major | Degrees Offered | Department | College | Page |
|---|---|---|---|---|---|
| *History | | Bachelor of Arts (B.A.) | History | Arts and Sciences | 79 |
| Hospitality and Resort Management | | Bachelor of Business Administration (B.B.A.) | Management | Business and Economics | 100 |
| Human Development and Learning | | Bachelor of Science in Education (B.S.Ed.) | Instruction and Curriculum Leadership | Education | 137 |
| Individual Studies | | Bachelor of Liberal Arts (B.L.S.)<br>Bachelor of Professional Studies (B.P.S.) | | University College | 157 |
| Integrative Studies | (1) Early & Middle Grades K-8 Licensure<br>(2) Society Services Non-Licensure | Bachelor of Science in Education (B.S.Ed.) | Instruction and Curriculum Leadership | Education | 138 |
| *International Business | | Bachelor of Business Administration (B.B.A.) | Interdisciplinary Program | Business and Economics | 100 |
| *International Studies | (1) Africa and the Middle East<br>(2) American Foreign Policy<br>(3) Asia<br>(4) Latin America<br>(5) Russia and Eastern Europe<br>(6) Western Europe | Bachelor of Arts (B.A.) | Interdepartmental Programs | Arts and Sciences | 80 |
| *Journalism | (1) Advertising<br>(2) Broadcast News<br>(3) Internet Journalism<br>(4) News Editorial<br>(5) Public Relations | Bachelor of Arts (B.A.) | Journalism | Communication and Fine Arts | 116 |
| *Logistics/ Supply Chain Management | | Bachelor of Business Administration (B.B.A.) | Marketing & Supply Chain Management | Business and Economics | 102 |
| *Management | | Bachelor of Business Administration (B.B.A.) | Management | Business and Economics | 102 |
| *Management Information Systems | | Bachelor of Business Administration (B.B.A.) | Management Information Systems | Business and Economics | 103 |
| *Manufacturing Engineering Technology | | Bachelor of Science in Engineering Technology (B.S.E.T.) | Engineering Technology | Engineering | 148 |
| *Marketing Management | | Bachelor of Business Administration (B.B.A.) | Marketing | Business and Economics | 104 |
| *Mathematical Sciences | (1) Mathematics<br>(2) Statistics | Bachelor of Science (B.S.) | Mathematics | Arts and Sciences | 82 |
| Mechanical Engineering | (1) Biomedical Systems<br>(2) Energy Systems<br>(3) Mechanical Systems | Bachelor of Science in Mechanical Engineering (B.S.M.E.) | Mechanical Engineering | Engineering | 148 |
| Microbiology and Molecular Cell Sciences | (1) Biochemistry<br>(2) Microbiology<br>(3) Biotechnology | Bachelor of Science (B.S.) | Microbiology and Molecular Cell Sciences | Arts and Sciences | 83 |

* Minor available.

| Major | Concentration within Major | Degree Offered | Department | College | Page |
|---|---|---|---|---|---|
| Music | (1) Performance<br>(2) Sacred Music<br>(3) Composition<br>(4) Music History<br>(5) School Music<br>(Instrumental)<br>(Choral)<br>(6) Jazz and Studio<br>Composition/Arranging<br>(7) Jazz and Studio Performance | Bachelor of Music (B.M.) | Music | Communication and Fine Arts | 118 |
| Music Industry | (1) Music Business<br>(2) Recording Technology | Bachelor of Music (B.M.) | Music | Communication and Fine Arts | 116 |
| Nursing | | Bachelor of Science in Nursing (B.S.N.) | | Nursing | 151 |
| *Philosophy | | Bachelor of Arts (B.A.) | Philosophy | Arts and Sciences | 84 |
| Physical Education<br>Teacher Education | | Bachelor of Science in Education (B.S.Ed.) | Human Movement Sciences and Education | Education | 139 |
| *Physics | | Bachelor of Science (B.S.) | Physics | Arts and Sciences | 85 |
| *Political Science | | Bachelor of Arts (B.A.) | Political Science | Arts and Sciences | 86 |
| *Psychology | (1) General Psychology<br>(2) Behavioral Neuroscience | Bachelor of Arts (B.A.) | Psychology | Arts and Sciences | 87 |
| *Real Estate | | Bachelor of Business Administration (B.B.A.) | Insurance, Real Estate and Business Legal Studies | Business and Economics | 105 |
| *Risk Management and Insurance | | Bachelor of Business Administration (B.B.A.) | Insurance, Real Estate and Business Legal Studies | Business and Economics | 106 |
| *Sales | | Bachelor of Business Administration (B.B.A.) | Marketing | Business and Economics | 107 |
| *Social Work | | Bachelor of Arts (B.A.) | Sociology and Social Work | Arts and Sciences | 88 |
| *Sociology | | Bachelor of Arts (B.A.) | Sociology and Social Work | Arts and Sciences | 89 |
| Special Education | | Bachelor of Science in Education (B.S.Ed.) | Instruction and Curriculum Leadership | Education | 140 |
| Sport and Leisure Studies | (1) Leisure Management<br>(2) Sport Management | Bachelor of Science in Education (B.S.Ed.) | Human Movement Sciences and Education | Education | 140 |
| *Theatre | (1) Dance<br>(2) Design and Technical Production<br>(3) Performance | Bachelor of Fine Arts (B.F.A.) | Theatre and Dance | Communication and Fine Arts | 127 |

* Minor available.

# 6. Colleges, Degree Programs and Courses

The following section contains the specific requirements for completing each degree, major, minor, and certificate offered by the University. This section is organized by college and department. The courses offered by each college follow the degree program requirements of that college. *Students are urged to consult with an advisor for assistance in planning their degree programs and selecting appropriate courses.*

**Explanation of course description format:** The official course title appears in boldface type following the course number. The figures in parentheses after the course title denote the number of semester hours of credit for that course. If the credit is variable, to be determined by the department, that fact is indicated by the minimum and maximum credit, as BIOL 4000 (2-4).

If the phrase "Same as ..." and another course number appear in parentheses following the credit hours, the course is cross listed with a course in another department and when offered by both departments may be taken through either. If another course number in parenthesis follows the credit hours, it is the former number for the same course. Credit may not be received for both the former number and the current number of the same course.

For those courses including regular laboratory hours, the lecture/laboratory hour distribution is written in italics near the end of the course description. At the end of many course descriptions, prerequisites and/or corequisites are listed. Students are responsible for meeting the stated prerequisites prior to enrolling for the course.

A **[G]** at the end of the course description indicates that the course may be used to fulfill University General Education Program requirements. *These requirements vary somewhat according to the particular degree program or major.* Similarly, a **[W]** indicates a course approved as Writing Intensive for some programs, a **[C]** indicates a Computation Intensive course, and an **[I]** indicates an Integrative course.

Courses are numbered according to the following system:

| | |
|---|---|
| *0001-0999* | *Courses for which the credit does not apply toward minimum degree requirements or for which credit is restricted.* |
| *1000-1999* | *Courses primarily for freshmen* |
| *2000-2999* | *Courses primarily for sophomores* |
| *3000-3999* | *Courses primarily for juniors* |
| *4000-4999* | *Courses primarily for seniors and for which graduate credit is not offered.* |

(There is sometimes a corresponding 6000 number for which graduate credit is offered to graduate students who fulfill the additional requirements for such credit.)

1000-2000 level courses are lower division courses, 3000-4000 level courses are upper division courses. Course numbers have no reference to the semester in which the courses are taught.

A detailed outline of the registration procedure, individual course offerings (course, time, days, location, and instructor), and course or program revisions made since the publication of the most recent *Undergraduate Bulletin* and *Graduate Bulletin* can be found at the Registrar's web site at *http://www.enrollment.memphis.edu/registrar/*. The Academic Calendar listing all deadlines can be found at *http://www.enrollment.memphis.edu/registrar/calendars/academic.htm*

## Elements of Course Description

[1]**ART** [2]**4002-**[3]**6002.** [4]**Museum Operation.** [5]**(3).** [6]**(3050).** [7]**(Same as ANTH 4002).** [8]Basic aspects of museum organization, management, exhibit planning and execution, and maintenance of collections and records. [9]*Two lecture hours, two laboratory hours per week.* [10]PREREQUISITE: ART 3090. [11]COREQUISITE: ART 4001. [12](S/U). [13]**[G]** [14]**(F).**

1. Subject area
2. Course number/level
3. 6000 level cognate
4. Course title
5. Credit hours
6. Former course number
7. Cross listing
8. Course description
9. Lecture/laboratory description
10. Prerequisite
11. Corequisite
12. Special Grading
13. University General Education Program*
14. Semester in which course usually offered:
**(F)** = Fall, **(Sp)** = Spring, **(Su)** = Summer

* **[G]** = University General Education Program; **[C]** = Computation Intensive; **[W]** = Writing Intensive; **[I]** = Integrative

# The College of Arts and Sciences

HENRY A. KURTZ, Ph.D., *Dean*
*Room 217, Mitchell Hall, (901) 678-3067*
*http://artsci.memphis.edu*

| Department/Division | Major | Concentration Within Major | Degree Offered |
|---|---|---|---|
| Anthropology | *Anthropology | | Bachelor of Arts (B.A.) |
| Biology | *Biology | | Bachelor of Science (B.S.) |
| Chemistry | *Chemistry | | Bachelor of Science (B.S.)<br>Bachelor of Science in Chemistry (B.S.Ch.) |
| Criminology and Criminal Justice | *Criminology and Criminal Justice | | Bachelor of Arts (B.A.) |
| Economics | Economics | | Bachelor of Arts (B.A.) |
| Earth Sciences | *Geography | (1) Environmental and Earth Sciences<br>(2) Geographic Techniques<br>(3) Geography<br>(4) Urban Planning | Bachelor of Arts (B.A.)<br>Bachelor of Science (B.S.) |
| | *Geological Sciences | (1) Geology<br>(2) Geophysics | Bachelor of Science (B.S.) |
| English | *English | (1) Creative Writing<br>(2) English as a Second Language<br>(3) Language and Linguistics<br>(4) Literature<br>(5) Professional Writing | Bachelor of Arts (B.A.) |
| Foreign Languages and Literatures | *Foreign Languages (with single language concentration from the first five or multiple language concentration from total list) | (1) French<br>(2) German<br>(3) Greek<br>(4) Latin<br>(5) Spanish<br>(6) **Russian | Bachelor of Arts (B.A.) |
| History | *History | | Bachelor of Arts (B.A.) |
| Mathematical Sciences | *Computer Science | | Bachelor of Science (B.S.) |
| | *Mathematical Sciences | (1) Mathematics<br>(2) Statistics | Bachelor of Science (B.S.) |
| Microbiology and Molecular Cell Sciences | Microbiology and Molecular Cell Sciences | (1) Biochemistry<br>(2) Microbiology<br>(3) Biotechnology | Bachelor of Science (B.S.) |
| Philosophy | *Philosophy | | Bachelor of Arts (B.A.) |
| Physics | *Physics | | Bachelor of Science (B.S.) |
| Political Science | *Political Science | | Bachelor of Arts (B.A.) |
| Psychology | *Psychology | (1) Behavioral Neuroscience<br>(2) General Psychology | Bachelor of Arts (B.A.) |
| Social Work | *Social Work | | Bachelor of Arts (B.A.) |
| Sociology | *Sociology | | Bachelor of Arts (B.A.) |
| Interdisciplinary Studies | *African and African American Studies | | Bachelor of Arts (B.A.) |
| | International Studies | (1) Africa and the Middle East<br>(2) American Foreign Policy<br>(3) Asia<br>(4) Latin America<br>(5) Russia and Eastern Europe<br>(6) Western Europe | Bachelor of Arts (B.A.) |

*Minor available.

**A concentration in Russian requires a collateral foreign language concentration or a collateral major outside the Department of Foreign Languages and Literatures.

Individual program requirements described in *The University of Memphis 2003-2004 Undergraduate Bulletin* are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this *Bulletin*; or consult the Undergraduate *Bulletin* website at: *http://www.people.memphis.edu/~acadafflib/bulletin/bulletin.htmlx* for the latest updates.

## PURPOSES

The College of Arts and Sciences has three distinct functions within the framework of the University.

1) Its primary function is to offer a strong liberal arts program designed to help the students prepare themselves for life in their own cultural setting by acquiring the means and desire to continue the processes of intellectual development and character formation throughout their lives. "The purpose of education," wrote John Stuart Mill, "is to make capable and cultivated human beings". "Education has for its object the formation of character," wrote Herbert Spencer. We believe that people are people, no matter what their careers, and that if we can help people to become more capable and sensible, they will have better careers and lives. It is our belief that the best preparation for any profession or vocation is a thorough foundation in those major fields of human interest, which are included in the humanities, the natural sciences, and the social sciences. A program of liberal studies at The University of Memphis aims to provide the students with a store of factual knowledge, to introduce them to varying sets of principles, to stimulate them to think about and evaluate facts and principles, and to encourage them to order their own affairs and those of their society with the talent, insight, and discrimination they develop.
2) The College of Arts and Sciences offers this kind of education to the candidates for its own degrees, and to the students of other colleges of the University, all of whose degree plans call for courses in the arts and sciences.
3) The college offers preparatory courses for students interested in careers in medicine, dentistry, nursing, teaching, law and other professions; specific pre-professional programs, designed to prepare students to qualify for admission to professional schools, are available.

## ORGANIZATION OF THE COLLEGE

### Departments and Divisions

The College of Arts and Sciences comprises the following departments and divisions: Aerospace Studies, Anthropology, Biology, Chemistry, Earth Sciences, English, Foreign Languages and Literatures, History, Mathematical Sciences (including Computer Science), Microbiology and Molecular Cell Sciences, Military Science, Naval Science, Philosophy, Physics, Political Science, Psychology, the School of Urban Affairs and Public Policy (including City and Regional Planning, Criminology and Criminal Justice, Health Administration, Public and Nonprofit Administration, Social Work), and Sociology.

The various offerings of the departments and divisions of The College of Arts and Sciences are organized into four groups:

HUMANITIES: English, foreign languages and literatures, history, philosophy.

NATURAL SCIENCES: biology, chemistry, computer science, geology, mathematics, microbiology and molecular sciences, physical geography, physics.

SOCIAL SCIENCES: anthropology, city and regional planning, criminal justice, economics, geography (other than physical), health administration, political science, psychology, public administration, social work, sociology.

OTHER: African and African American Studies, Environmental Studies, Judaic Studies, International Studies, Legal Thought and Liberal Arts, ROTC programs (Aerospace Studies, Military Science, Naval Science), Women's Studies.

## RESIDENCE REQUIREMENTS

University residence requirements are explained in detail in the *Graduation from the University* section. A transfer student in The College of Arts and Sciences must earn at least 6 semester hours in residence in the major subject and at least 3 semester hours in the minor. These credits may be earned only through regular class enrollment for a letter grade.

## PRE-PROFESSIONAL TRAINING

Standing committees of the faculty are available to advise students interested in preparing for careers in various professional areas. Committee members representing departments of the University in which pre-professional training is given advise students concerning specific programs required by the various professional schools.

*Pre-Medical* – The Pre-Professional Advisor, in the Dean's Office, offers advising and career information to students planning on applying to the following health-professional schools: medicine, dentistry, pharmacy, optometry, veterinary medicine, and allied health fields including cytotechnology, dental hygiene, health information management, medical technology, occupational therapy and physical therapy.

*Pre-Law* – In general, accredited law schools have not adopted specific requirements for pre-law education; they do, however, emphasize certain courses as being conducive to the development of the broad cultural background necessary for the successful study of law. Students enrolling in The College of Arts and Sciences and interested in applying to law school should see the Pre-Professional Advisor for further information.

*Teacher Preparation* – Students who wish to prepare for teaching careers in the secondary schools of Tennessee will be expected to complete a baccalaureate degree with a major in the intended teaching area, followed by earning a Master of Arts in Teaching degree program through the College of Education. Additional information on licensure requirements may be obtained from the Office of Teacher Education in the College of Education.

## COLLEGE AND DEGREE REQUIREMENTS

Listed below are the specific college requirements for all degree programs offered in the College of Arts and Sciences. Students pursuing the Bachelor of Science in Chemistry degree should see the specific requirements for that degree on page 72.

#### Bachelor of Arts (B.A.) (18-19 hours)

These hours are in addition to the University General Education Program requirements.

*Foreign Language:* 6 hours in a single foreign language at or above the 2000 level or equivalent.

1. If the language chosen was used to meet University admissions requirements, students must take the foreign language placement exam (if they have not already successfully completed a language course at an accredited institution of higher education). For information about the dates and place of placement exams, contact the Department of Foreign Languages and Literatures. On the basis of the results of the placement exam, students should follow these guidelines:

If placed into 1010: complete 1010, 1020, 2010, 2020
If placed into 1020: complete 1020, 2010, 2020
If placed into 2010: complete 2010, 2020
If placed into 2020: complete 2020
If placed into 3301 or higher:
language requirement fulfilled
Or complete 6 hours at the 2000 level or above of another language

2. Students presenting a language to meet University admission requirements cannot receive credit for 1010 in that language.
3. No credit hours are immediately granted on the basis of the placement exam.
4. Satisfactory completion of the language requirement by means of the placement exam will be noted on the student's transcript.
5. Students whose first college-level language course is 2010 or higher and who pass this course with a minimum grade of "C" may apply for Credit by Course Placement. The applicable fees are listed in the Miscellaneous Fees section of this *Bulletin*. Students wishing such credit must make written application to the chair of the Department of Foreign Languages and Literatures. Credit by Course Placement shall apply only to the lower division, and credit gained in this manner shall not exceed 12 semester hours in any one language. For additional information, see Credit by Course Placement in Section 5 of this *Bulletin*.
6. Once a student begins with a lower-division course, all remaining higher-numbered courses in the lower division must be taken in sequence, without skipping. For example, students who begin with LATN 1010 cannot skip LATN 1020 and enroll in LATN 2010.
7. For students whose mother tongue is not English, lower-division credit in the native language will be awarded when the student has successfully completed the English composition requirement for graduation and has proven proficiency in the native language to the satisfaction of the Department of Foreign Languages and Literatures. The student must make written application to the chair of the Department of Foreign Languages and Literatures.

*Humanities:* 3 hours of upper-division coursework, in an area outside of the major, to be chosen from one of the following categories. Please note that some courses have prerequisites:

1. Any upper-division literature course in CHIN, CLAS, ENGL, FREN, GERM, GREK, ITAL, JAPN, LALI, LATN, RUSS, or SPAN. Students should consult with their advisor or with the department to determine the appropriated courses.
2. Any upper-division HIST course, **except** HIST 2030, 3045, 3300, 3863, 4020, 4022, 4851, 4871, 4881, 4998, 4999.
3. Any upper-division PHIL course.
4. Judaic Studies: JDST 3201, 3202, 3661, 3801, 3802, 4671.
5. Political Thought: POLS 3102, 3401, 3402, 4405, 4415, 4416.
6. THEA 4852

*Fine Arts Heritage:* 3 hours (in a different subject area than University General Education Program requirement) from: ART 1030, ARTH 2101, COMM 1851, COMM 4850, COMM 4858, DANC 1151, DANC 3101, MUS 1030, MUHL 4800, THEA 1030, THEA 4551, THEA 4552.

*Mathematics/Natural Sciences:* 3-4 hours of Mathematics or Natural Sciences, in an area outside of the major.

1. Mathematics: one MATH course (not to repeat University General Education Program requirements), or PHIL 1611.
2. Natural Sciences: 3-4 hours (different from the University General Education Program science), selected from: BIOL/MMCS 1010/1011, BIOL 1020/1021; BIOL/MMCS 1110/1111, BIOL 1120/1121; CHEM 1010/1011, 1020/1021; CHEM 1110/1111, 1120/1121; GEOG 1003, 1010/1011, 1020/1021, 3221, 4120, 4122, 4201, 4211, 4231, 4241; GEOL 1040/1050, 1103, 3802; PHYS 1010/1001, 1020/1002; PHYS 2010/2011, 2020/2021, 2110/2111, 2120/ 2121; PSYC 3306 (if University General Education Program sequence is not biology); UNHP 3407; UNIV 1610, 1611. NOTE: If a course has a lab, the lab must also be taken to complete this requirement.

*Social Science:* 3 hours of a Social Science (in addition to University General Education Program requirements) in an area outside of the major. No more than two courses from one discipline may be used to fulfill the University General Education Program and B.A. Social Science requirements. Coursework to be chosen from: AAAS 2100, ANTH 1100, 1200; CJUS 1100, 2110, 3510; COMM 1780, 4375; ECON 2110, 2120; GEOG 1301, 1401, 3430, 4304, 4306, 4313, 4316, 4324, 4325, 4431; HIST 4871; JOUR 1700, 4700, 4712; POLS 1100, 1301, 1501, 3213, 3216, 3506; PSYC 1200, 3510; SOCI 1111, 2100, CSED/SOCI 2101, SOCI 3112, 3401, 3432, 3701, 3831, 3860, 4442, 4631, 4923; UNIV 2304; WMST 2100.

*To qualify for the Bachelor of Arts degree,* the student must complete a minimum of 124 semester hours with a grade point average of 2.0. Of the 124 semester hours required, not more than 42 semester hours in any one subject will be counted toward a degree. A minimum of 42 semester hours must be in courses from the upper division.

### Bachelor of Science (B.S.) (15-16 hours)

These hours are in addition to the University General Education Program requirements.

*Foreign Language:* 6 hours in a single foreign language, or equivalent. If the language chosen is the same language used to fulfill University admission requirements, course must be at the 1020 level or above. If a different language is chosen, any six hours will fulfill the requirement.

1. If the language chosen was used to meet University admissions requirements, students must take the foreign language placement exam (if they have not already successfully completed a language course at an accredited institution of higher education). For information about the dates and place of placement exams, contact the Department of Foreign Languages and Literatures. On the basis of the results of the placement exam, students should follow these guidelines:

   If placed into 1010: complete 1010, 1020, 2010
   If placed into 1020: complete 1020, 2010
   If placed into 2010: complete 2010
   If placed into 2020 or higher: language requirement fulfilled
   Or complete 6 hours at any level of another language
2. Students presenting a language to meet University admission requirements cannot receive credit for 1010 in that language.
3. No credit hours are immediately granted on the basis of the placement exam.

4. Satisfactory completion of the language requirement by means of the placement exam will be noted on the student's transcript.
5. Students whose first college-level language course is 2010 or higher and who pass this course with a minimum grade of "C" may apply for Credit by Course Placement. The applicable fees are listed in the Miscellaneous Fees section of this Bulletin. Students wishing such credit must make written application to the chair of the Department of Foreign Languages and Literatures. Credit by Course Placement shall apply only to the lower division, and credit gained in this manner shall not exceed 12 semester hours in any one language. For additional information, see Credit by Course Placement in Section 5 of this Bulletin.
6. Once a student begins with a lower-division course, all remaining higher-numbered courses in the lower division must be taken in sequence, without skipping. For example, students who begin with LATN 1010 cannot skip LATN 1020 and enroll in LATN 2010.
7. For students whose mother tongue is not English, lower-division credit in the native language will be awarded when the student has successfully completed the English composition requirement for graduation and has proven proficiency in the native language to the satisfaction of the Department of Foreign Languages and Literatures. The student must make written application to the chair of the Department of Foreign Languages and Literatures.

*Humanities:* 3 hours of upper-division coursework, in an area outside of the major, to be chosen from one of the following categories. Please note that some courses have prerequisites:

1. Any upper-division literature course in CHIN, CLAS, ENGL, FREN, GERM, GREK, ITAL, JAPN, LALI, LATN, RUSS, or SPAN. Students should consult with their advisor or with the department to determine the appropriated courses.
2. Any upper-division HIST course, **except** HIST 2030, 3045, 3300, 3863, 4020, 4022, 4851, 4871, 4881, 4998, 4999.
3. Any upper-division PHIL course.
4. Judaic Studies: JDST 3201, 3202, 3661, 3801, 3802, 4671.
5. Political Thought: POLS 3102, 3401, 3402, 4405, 4415, 4416.
6. THEA 4852

*Mathematics/Natural Sciences (3-4 hours):* MATH 1830 or 1910 is required for all B.S. degree programs.

3-4 hours of Mathematics or Natural Sciences in an area outside of the major, in addition to MATH 1830 or 1910.

1. Mathematics: One course (not to repeat University General Education Program requirements), or PHIL 1611.
2. Natural Sciences: 3-4 hours (different from the University General Education Program science), selected from: any course (plus lab, if applicable) in Biology, Chemistry (except CHEM 1100), Geological Sciences, Microbiology and Molecular Cell Sciences, Physics; GEOG 1010/1011, 1020/1021, 1003, 3221, 4120, 4122, 4201, 4211, 4231, 4241; PSYC 3306 (if the University General Education Program sequence above is not biology); UNHP 3407; UNIV 1610, 1611. NOTE: If a course has a lab, the lab must be taken to complete this requirement.

*Social Science:* 3 hours of a Social Science (in addition to University General Education Program requirements) in an area outside of the major. No more than two courses from one discipline may be used to fulfill the University General Education Program and B.S. Social Science requirements. Coursework to be chosen from: AAAS 2100 ANTH 1100, 1200; CJUS 1100, 2110, 3510; COMM 1780; ECON 2110, 2120; GEOG 1301, 1401, 3430, 4304, 4306, 4313, 4316, 4324, 4325, 4431; HIST 4871; JOUR 1700; POLS 1100, 1301, 1501, 3213, 3216, 3506; PSYC 1200, 3510; SOCI 1111, 2100, CSED/SOCI 2101, SOCI 3112, 3401, 3432, 3701, 3831, 3860, 4442, 4631, 4923, UNIV 2304; WMST 2100.

*To qualify for the Bachelor of Science degree,* the student must complete a minimum of 124 semester hours with a grade point average of 2.0. Of the 124 semester hours required, not more than 42 semester hours in any one subject will be counted toward a degree. A minimum of 42 semester hours must be in courses from the upper division.

## DEPARTMENTAL REQUIREMENTS FOR MAJORS AND MINORS

Listed below are the specific course requirements for all majors and minors offered in The College of Arts and Sciences. A minimum grade of "C" is required in every course applicable toward a major or minor (including corequisites), except in beginning courses and in sophomore English.

Every student should be aware that the mere completion of courses outlined below with a minimum grade of "C" does not guarantee classification as a major or minor in the discipline concerned; the student must be recommended by the chair of the department in which the major or minor is sought. If, in the opinion of the department chair, the quality of the student's work is not high enough, additional work, the repetition of courses, or other evidence of acceptable scholarship may be required.

# AFRICAN and AFRICAN AMERICAN STUDIES

## Interdisciplinary Studies Office

## African and African American Studies Major (B.A.)

### A. University General Education Program (48-51 hours)

See page 57 for the University General Education Program requirements.

### B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed on page 67.

### C. The Major (30 hours)

1. *Major Core (18 hours):*

   Completion of AAAS 2100, 3100, and 4100; and one course selected from each concentration (9 hours).

2. *Concentration (12 hours from one of the following groups):*
   a. *Humanities:* ENGL 3325, 3326, 4372, 4373; HIST 3273, 3274, 3280, 4050-69 (Special Topics related to African American experience), 4273, 4285, 4286, 4287, 4871, 4881, 4882; PHIL 3741.
   b. *Social and Behavioral Sciences:* ANTH 3232, 3242, 3351, 4051, 4120, 4220, 4411, 4412; GEOG 4316, 4324, 4325, 4431; ECON 3411, 4740; POLS 3304, 3306, 4222, 4415, 4416; SOCI 3311, 3401, 3420, 3422, 4420, 4442 [W], 4460 [W].
   c. *The Arts:* ARTH 4111, 4112, 4113, 4181, 4183, 4185; COMM 3361, 4341, 4373, 4375; MUHL 4800, 4801, 4804, 4805, 4806, 4807; THEA 4559.

### D. Electives

Electives may be chosen to bring the total number of hours to 124.

### E. Computer Literacy

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

## African and African-American Studies Minor

Completion of 18 semester hours including AAAS 2100, 3100, and 12 hours of electives from the following groups, with at least 3 hours from each group. Students may also choose other courses not on the following list as substitutions with the approval of the African and African American Studies advisor:

a. *Humanities:* ENGL 3325, 3326, 4372, 4373; HIST 3273, 3274, 3280, 4050-69 (Special Topics related to African American experience), 4273, 4285, 4286, 4287, 4871, 4881, 4882; PHIL 3741.

b. *Social and Behavioral Sciences:* ANTH 3232, 3242, 3351, 4051, 4120, 4220, 4411, 4412; GEOG 4316, 4324, 4325, 4431; ECON 3411, 4740; POLS 3304, 3306, 4222, 4415, 4416; SOCI 3311, 3401, 3420, 3422, 4420, 4442 [W], 4460 [W].

c. *The Arts:* ARTH 4111, 4112, 4113, 4181, 4183, 4185; COMM 3361, 4341, 4373, 4375; MUHL 4800, 4801, 4804, 4805, 4806, 4807; THEA 4559.

### Typical 4-Year African and African American Studies Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| COMP 1200 | 4 | HMSE 1100 | 2 |
| Social Science* | 3 | COMM 2381 | 3 |
| | | PHED* | 2 |
| Semester Totals | 14 hrs | | 17 hrs |
| **Sophomore Year** | | | |
| Literary Heritage* | 3 | American Heritage* | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Social Science* | 3 | SOCI 3311[C] | 3 |
| AAAS 2100 | 3 | Hist/Phil Heritage* | 3 |
| AAAS core elective | 3 | Social Science/B.A. | 3 |
| Fine Arts Heritage* | 3 | Fine Arts Heritage/B.A. | 3 |
| Semester Totals | 18 hrs | | 18 hrs |
| **Junior Year** | | | |
| AAAS core elective | 3 | AAAS core elective | 3 |
| Writing Intensive [W] | 3 | AAAS conc. elective | 3 |
| MATH* | 3 | Integrative [I] | 3 |
| Hist/Phil Heritage* | 3 | Humanities/B.A. | 3 |
| American Heritage* | 3 | Elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| **Senior Year** | | | |
| Nat. Sci./Math/B.A. | 3-4 | AAAS 4100 | 3 |
| AAAS conc. elective | 3 | Electives | 9 |
| AAAS conc. elective | 3 | AAAS conc. elective | 3 |
| AAAS 3100 | 3 | | |
| Semester Totals | 12-13 hrs | | 15 hrs |

Total Hours: 124-125

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

# ANTHROPOLOGY

## Department of Anthropology

## Anthropology Major (B.A.)

### A. University General Education Program (48 - 51 hours)

See page 57 for the University General Education Program requirements.

### B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed on page 67.

### C. The Major (30 hours)

Completion of 30 semester hours in anthropology courses including ANTH 1100, 1200, 3200, 4065; and 18 additional semester hours, at least 6 of which must be at the 4000 level.

### D. Electives

Electives may be chosen to bring the total number of hours to 124.

### E. Computer Literacy

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

### F. Honors Program

The Department of Anthropology offers an honors program in anthropology to the superior anthropology student who desires a more intensive approach to and knowledge of the discipline, a deeper understanding of research skills, and an opportunity for original criticism and analysis. To be eligible a student must (a) have the approval of the Departmental Honors Committee, (b) be an anthropology major, (c) have attained at least junior standing, (d) have completed successfully ANTH 1100, 1200, and one upper-division anthropology course, (e) maintained a minimum cumulative grade point average of 3.00 in overall studies, (f) maintained a minimum cumulative grade point average of 3.25 in anthropology, (g) completion of four honors courses in anthropology (at least one of which must be an independent study culminating in a research paper/thesis or research report) and a minimum of six hours in honors courses outside anthropology. Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred, "With Honors in Anthropology." Moreover the student's diploma and the record at The University of Memphis will reflect this accomplishment. Details of the program are available at the Department of Anthropology office.

## Anthropology Minor

Completion of 18 semester hours in anthropology courses, including ANTH 1100, 1200, 3200, and 4065.

### Typical 4-Year Anthropology Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ANTH 1100 | 3 | ANTH 1200 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH* | 3 | MATH* | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Semester Totals | 16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| ANTH 3200 | 3 | American Heritage* | 3 |
| ANTH core elective | 3 | Elective | 3 |
| Literary Heritage* | 3 | Fine Arts Heritage* | 3 |
| American Heritage* | 3 | Hist/Phil Heritage* | 3 |
| COMP 1200 | 4 | HMSE 1100 | 2 |
| | | ANTH core elective | 3 |
| Semester Totals | 16 hrs | | 17 hrs |

| Junior Year | | | |
|---|---|---|---|
| Integrative [I] | 3 | ANTH 4065 | 3 |
| COMM 2381 | 3 | Upper division ANTH core | 3 |
| Social Science/B.A. | 3 | Upper division elective | 3 |
| Hist/Phil Heritage* | 3 | Fine Arts Heritage/B.A. | 3 |
| Upper division ANTH core | 3 | Nat. Sci./Math/B.A. | 3-4 |
| Semester Totals | 15 hrs | | 15-16 hrs |

| Senior Year | | | |
|---|---|---|---|
| ANTH core elective | 3 | ANTH core elective | 3 |
| Humanities/B.A. | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
| PHED* | 2 | Elective | 3 |
| Semester Totals | 14 hrs | | 15 hrs |

Total Hours: 124-125

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

# BIOLOGY

## Department of Biology

## ADVANCED PLACEMENT

Beginning freshmen who have completed an advanced biology course in high school may apply to the chair of the Department of Biology during the semester preceding enrollment for advanced placement.

Freshmen scoring 3 on the Advanced Placement Test will receive credit hours for BIOL/MMCS 1010/1011, BIOL 1020/1021. Those scoring 4 or higher will receive credit hours for BIOL/MMCS 1110/1111, BIOL 1120/1121.

## Biology Major (B.S.)

**A. University General Education Program (48 - 49 hours)**

See page 57 for the University General Education Program requirements. Note that MATH 1830 or MATH 1910 is required for the B.S. degree.

**B. College and Degree (B.S.) Requirements (15-16 hours)**

The College and Bachelor of Science requirements are in addition to the University General Education Program requirements and are listed on page 68.

**C. The Major (48 hours in addition to University General Education Program and B.S. degree requirements)**

Students must earn a minimum grade of "C" in all biological science (BIOL and MMCS) courses applied toward the major, the minor, and in all required chemistry and physics courses. Students must complete BIOL/MMCS 1110/1111, and BIOL 1120/1121, before enrolling in any upper division course.

Completion of 36 hours in biological science courses, 16 hours in chemistry courses, and 8 hours in physics courses as outlined: BIOL/MMCS 1110/1111, BIOL 1120/1121, CHEM 1110/1111 (these courses are included in the University General Education Program and B.S. degree requirements), and BIOL 3050, 3072, 3073; one of BIOL 3030, 3230 or 3730; one of MMCS 3130 or 3500; 13 additional upper division hours in biological science courses approved by the department; CHEM 1120/1121, 3311/3301 and 3312/3302; and PHYS 2010/2011, 2020/2021 or 2110/2111, 2120/2121.

**D. Electives**

Electives may be chosen to bring the total number of hours to 124.

**E. Computer Literacy**

This requirement is met by successfully passing BIOL 3050, 3072, and 3073.

## Biology Minor

Completion of 18 semester hours in biology courses including BIOL/MMCS 1110/1111, BIOL 1120/1121 and 10 upper division hours.

## Typical 4-Year Biology Sequence

| Freshman Year | | | |
|---|---|---|---|
| CHEM 1110/1111 | 4 | BIOL/MMCS 1110/1111 | 4 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| HMSE 1100 | 2 | CHEM 1120/1121 | 4 |
| MATH 1830 or 1910 | 3-4 | Foreign Language/B.S. | 3 |
| Foreign Language/B.S. | 3 | PHED* | 2 |
| Semester Totals | 15-16 hrs | | 16 hrs |

| Sophomore Year | | | |
|---|---|---|---|
| BIOL 1120/1121 | 4 | CHEM 3312/3302 | 4 |
| CHEM 3311/3301 | 4 | BIOL 3050 [W,C] | 4 |
| COMP 1200 | 4 | COMM 2381 | 3 |
| Literary Heritage* | 3 | Hist/Phil Heritage* | 3 |
| | | Social Science* | 3 |
| Semester Totals | 15 hrs | | 17 hrs |

| Junior Year | | | |
|---|---|---|---|
| PHYS 2010/2011 | 4 | MMCS 3500 or 3130 | 3 |
| BIOL core elective | 3 | PHYS 2020/2021 | 4 |
| American Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Social Science* | 3 | Upper division BIOL | 3 |
| Elective | 3 | | |
| Semester Totals | 16 hours | | 13 hrs |

| Senior Year | | | |
|---|---|---|---|
| Upper division BIOL | 3 | BIOL 3072 [I]/3073 | 4 |
| Upper division BIOL | 4 | Upper division BIOL | 3 |
| Elective | 3 | Upper division elective | 3 |
| American Heritage* | 3 | Social Science/B.S. | 3 |
| Fine Arts Heritage* | 3 | Humanities/B.S. | 3 |
| Semester Totals | 16 hrs | | 16 hrs |

Total Hours: 124

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

# CHEMISTRY

## Department of Chemistry

The Department of Chemistry offers courses leading to the B.S. degree with a major in chemistry. The department also offers a program culminating in the professional degree of Bachelor of Science in Chemistry (B.S.Ch.). This program is designed to meet the requirements of the Committee on Professional Training of the American Chemical Society, and is undertaken primarily by students who desire to go directly to positions in the chemical industry, or to enroll for postgraduate study in chemistry.

### SEQUENCE OF COURSES

Students who present credit for at least two years of high school mathematics (including algebra), or who have a minimum ACT mathematics score of 22, should enroll in CHEM 1110/1111 if they plan to take more than one year of college chemistry, or plan to major in either a natural science or in civil,

mechanical, or electrical engineering. CHEM 1100 is a one-semester course for students of limited preparation in mathematics or high school chemistry whose curriculum calls for the CHEM 1110/1111-1120/1121 sequence. CHEM 1010/1011-1020/1021 is a two-semester sequence for students interested in the science of chemistry, but is not credited toward a major in chemistry or physics. It does fulfill the university science requirements of other majors. Credit may not be received for both CHEM 1100 and CHEM 1110 or CHEM 1010 simultaneously.

### ADVANCED PLACEMENT

Beginning students who have had previous high school training in chemistry are invited to apply for advanced placement.

### LABORATORY SAFETY AND COURSE REQUIREMENTS

Laboratory safety is strictly practiced in the Department of Chemistry. Approved eye protection must be worn as required in all chemical laboratories. In addition, to ensure that students enrolled in laboratory courses learn the necessary safety information to safely participate in the laboratory course, all prerequisites and/or corequisites for all laboratory courses are strictly enforced. As a result, when a student enrolls in a laboratory course without prior completion of the necessary prerequisite or corequisite, the student will be dropped from the laboratory course. In addition, when a student simultaneously enrolls in a laboratory course and corequisite course, but subsequently drops or discontinues the corequisite course, the student will be dropped from the laboratory course. In the event any student fails to comply with any safety requirements of the Department of Chemistry, the department has the right to not allow the student to perform laboratory work, or to withdraw the student from the laboratory course, as appropriate.

The requirements listed below are for majors and minors for the Bachelor of Science degrees or for minors for the Bachelor of Arts degrees; for detailed requirements for the Bachelor of Science in Chemistry, a professional degree, see degree requirements described later in this section.

**NOTE:** Students must complete CHEM 1110/1111, 1120/1121 before enrolling in any upper division course applied toward the major or the minor.

## Chemistry Major (B.S.)

**A. University General Education Program (48 - 49 hours)**

See page 57 for the University General Education Program requirements. Note the following specification for the B.S. degree: *Mathematics* - MATH 1910.

**B. College and Degree (B.S.) Requirements (15-16 hours)**

The College and Bachelor of Science requirements are in addition to the University General Education Program requirements and are listed on page 68.

**C. The Major (34 - 36 hours in addition to University General Education Program and B.S. degree requirements)**

Completion of 32 hours in chemistry courses, 10-12 hours in mathematics courses, and 8 hours in physics courses as outlined below: CHEM 1110/1111, 1120/1121 (these courses must be completed prior to enrolling in the following; these courses are included in the University General Education requirements), CHEM 3201/3211 [C], 3301/3311, 3302/3312, and sufficient additional upper division semester hours.

MATH 1910 (this course is included in the University General Education requirements), and two of the following courses: MATH 1920, 2110, 4611, COMP 4001.

PHYS 2110/2111, 2120/2121 or 2010/2011, 2020/2021 (four hours of these courses are included in the B.S. degree requirements).

**D. Electives**

Electives may be chosen to bring the total number of hours to 124.

**E. Computer Literacy**

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

## Typical 4-Year Chemistry Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| CHEM 1110/1111 | 4 | CHEM 1120/1121 | 4 |
| COMP 1200 | 4 | MATH 1910 | 4 |
| HMSE 1100 | 2 | PHED* | 2 |
| Foreign Language/B.S. | 3 | Foreign Language/B.S. | 3 |
| Semester Totals | 16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| Fine Arts Heritage* | 3 | COMM 2381 | 3 |
| Literary Heritage* | 3 | CHEM 3312/3302 | 4 |
| CHEM 3311/3301 | 4 | PHYS 2120 or 2020 | 3 |
| MATH (see list) | 3-4 | PHYS 2111 or 2021 | 1 |
| PHYS 2110 or 2010 | 3 | Hist/Phil Heritage* | 3 |
| PHYS 2111 or 2011 | 1 | MATH (see list) | 3-4 |
| Semester Totals | 17-18 hrs | | 17-18 hrs |
| **Junior Year** | | | |
| CHEM 3211/3201 [C] | 4 | CHEM elective | 3 |
| Hist/Phil Heritage* | 3 | Social Science* | 3 |
| Upper division elective | 3 | Upper division elective | 3 |
| CHEM elective | 3 | Upper division elective | 3 |
| Upper division elective | 3 | Humanities/B.S. | 3 |
| Semester Totals | 16 hrs | | 15 hrs |
| **Senior Year** | | | |
| Writing Intensive [W] | 3 | CHEM elective | 3 |
| Social Science* | 3 | Social Science/B.S. | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| Elective | 3 | Integrative [I] | 3 |
| Upper division elective | 3 | | |
| Semester Totals | 15 hrs | | 12 hrs |

Total Hours: 124

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

## Chemistry Major (B.S. Ch.)

**A. University General Education Program (48 - 49 hours)**

See page 57 for the University General Education Program requirements. Note the following specifications for the B.S. Ch. degree: *Mathematics* - MATH 1910; *Natural Science* - CHEM 1110/1111, 1120/1121.

**B. College and Degree (B.S.Ch.) Requirements (14 hours)**

*Foreign Language:* 6 hours in a single foreign language, or equivalent. If the language chosen is the same language used to fulfill University admission requirements, course must be at the 1020 level or above. If a different language is chosen, any six hours will fulfill the requirement.

1. If the language chosen was used to meet University admissions requirements, students must take the foreign language placement exam (if they have not already successfully completed a language course at an accredited institution of higher education). For information about the dates and place of placement exams, contact the Department of Foreign Languages and Literatures. On the basis of the results of the placement exam, students should follow these guidelines:
   If placed into 1010: complete 1010, 1020, 2010
   If placed into 1020: complete 1020, 2010
   If placed into 2010: complete 2010
   If placed into 2020 or higher: language requirement fulfilled
   Or complete 6 hours at any level of another language

2. Students presenting a language to meet University admission requirements cannot receive credit for 1010 in that language.
3. No credit hours are immediately granted on the basis of the placement exam.
4. Satisfactory completion of the language requirement by means of the placement exam will be noted on the student's transcript.
5. Students whose first college-level language course is 2010 or higher and who pass this course with a minimum grade of "C" may apply for Credit by Course Placement. The applicable fees are listed in the Miscellaneous Fees sections of this Bulletin. Students wishing such credit must make written application to the chair of the Department of Foreign Languages and Literatures. Credit by Course Placement shall apply only to the lower division, and credit gained in this manner shall not exceed 12 semester hours in any one language. For additional information, see Credit by Course Placement in Section 5 of this Bulletin.
6. Once a student begins with a lower-division course, all remaining higher-numbered course in the lower division must be taken in sequence, with out skipping. For example, students who begin with LATN 1010 cannot skip LATN 1020 and enroll in LATN 2010.
7. For students whose mother tongue is not English, lower-division credit in the native language will be awarded when the student has successfully completed the English composition requirement for graduation and has proven proficiency in the native language to the satisfaction of the Department of Foreign Languages and Literatures. The student must make written application to the chair of the Department of Foreign Languages and Literatures.

*Mathematics (8 hours):* MATH 1920, 2110.

*To qualify for the Bachelor of Science in Chemistry degree,* the student must complete a minimum of 124 semester hours with a grade point average of 2.0. Of the 124 semester hours required, not more than 42 semester hours in any one subject will be counted toward a degree. A minimum of 42 semester hours must be in courses from the upper division.

### C. The Major (41 hours in addition to University General Education Program and B.S.Ch. requirements)

CHEM 1110/1111, 1120/1121 (these courses are included in the University General Education Program requirements); CHEM 3201/3211 [C], 3301/3311, 3302/3312, 3402/3412, 3411, 4101, 4111, 4511, 4604, 4901, 4902, 4903; PHYS 2110/2111, 2120/2021; or 2010/2011, 2020/2021.

### D. Electives

Electives may be chosen to bring the total number of hours to 124.

### E. Computer Literacy

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

## Chemistry Minor

Completion of 20 semester hours in chemistry courses, including CHEM 1110/1111, 1120/1121 (these courses must be completed prior to enrolling in the following), CHEM 3301, 3302, 3311, 3312, and four upper division semester hours.

## Typical 4-Year Bachelor of Science in Chemistry Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| CHEM 1110/1111 | 4 | CHEM 1120/1121 | 4 |
| COMP 1200 | 4 | MATH 1910 | 4 |
| HMSE 1100 | 2 | PHED* | 2 |
| Fine Arts Heritage* | 3 | COMM 2381 | 3 |
| Semester Totals | 16 hrs | | 16 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| Foreign Language/B.S. | 3 | Foreign Language/B.S. | 3 |
| Literary Heritage* | 3 | CHEM 3312/3302 | 4 |
| CHEM 3311/3301 | 4 | PHYS 2120/2121 | 4 |
| PHYS 2110/2111 | 4 | Hist/Phil Heritage* | 3 |
| MATH 1920 | 4 | MATH 2110 | 4 |
| Semester Totals | 18 hrs | | 18 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| CHEM 4901 | 1 | CHEM 4604 [I] | 3 |
| CHEM 3201/3211 [C] | 4 | CHEM 3402/3412 | 5 |
| CHEM 3411 | 3 | Social Science* | 3 |
| Social Science* | 3 | American Heritage* | 3 |
| American Heritage | 3 | | |
| Hist/Phil Heritage* | 3 | | |
| Semester Totals | 17 hrs | | 14 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| CHEM 4111/4101 | 4 | CHEM 4511 | 3 |
| Writing Intensive [W] | 3 | Upper division elective | 3 |
| Fine Arts Heritage/B.S. | 3 | Elective | 3 |
| Upper division elective | 3 | Elective | 3 |
| Semester Totals | 13 hrs | | 12 hrs |

Total Hours: 124

Total Hours Required for Graduation: 124

*Must Satisfy University General Education Requirement

# COMPUTER SCIENCE

## Department of Mathematical Sciences

## Computer Science Major (B.S.)

### A. University General Education Program (49 hours)

See page 57 for the University General Education Program requirements. Note the following requirements specified for the Computer Science major: *Mathematics* - MATH 1910; *Natural Science* - PHYS 2110/2111, 2020/2021; ECON 2120 is strongly recommended for the *Social Science* requirement.

### B. College and Degree (B.S.) Requirements (15-16 hours)

The College and Bachelor of Science requirements are in addition to the University General Education Program requirements and are listed on page 68.

### C. The Major (51 - 53 hours in addition to University General Education Program and B.S. degree requirements)

Completion of MATH 1910, 1920 (these courses are included in the University General Education Program and B.S. degree requirements), 2701, 3242 [C], 4614; COMP 1900 (4), 2150, 3160, 3410, 4030, 4040 [W], 4270 [I], 4601, and an elective sequence that is a coherent package of 17-19 hours of computer-oriented courses designed by the student and the faculty advisor and approved by the Computer Science faculty.

### D. Electives

Electives may be chosen to bring the total number of semester hours to 124.

### E. Computer Literacy

This requirement is satisfied by the courses in the major.

## Computer Science Minor

Completion of 22 semester hours in computer science courses, including COMP 1900 (4), 2150, 3410, 4030 and 9 additional upper division semester hours.

## Typical 4-Year Computer Science Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| COMP 1900 | 4 | COMP 2150 | 3 |
| MATH 1910 | 4 | MATH 1920 | 4 |
| ENGL 1010 | 3 | MATH 2701 | 3 |
| American Heritage* | 3 | ENGL 1020 | 3 |
| Foreign Language/B.S. | 3 | Foreign Language/B.S. | 3 |
| Semester Totals | 17 hrs | | 16 hrs |

| | | | |
|---|---|---|---|
| **Sophomore Year** | | | |
| COMP 3160 | 3 | COMP 3410 | 3 |
| PHYS 2110/2111 | 4 | PHYS 2120/2121 | 4 |
| COMM 2381 | 3 | Hist/Phil Heritage* | 3 |
| HMSE 1100 | 2 | American Heritage* | 3 |
| PHED* | 2 | Social Science* | 3 |
| Elective | 3 | | |
| Semester Totals | 17 hrs | | 16 hrs |
| **Junior Year** | | | |
| COMP 4030 | 3 | COMP 4601 | 3 |
| MATH 3242 [C] | 3 | Elective Sequence | 3 |
| Elective Sequence | 3 | Elective Sequence | 3 |
| Hist/Phil Heritage* | 3 | Social Science/B.S. | 3 |
| Social Science* | 3 | Fine Arts Heritage* | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| **Senior Year** | | | |
| COMP 4040 [W] | 3 | COMP 4270 [I] | 3 |
| MATH 4614 | 3 | Elective Sequence | 3 |
| Elective Sequence | 3 | Elective Sequence | 3 |
| Literary Heritage* | 3 | Humanities/B.S. | 3 |
| Elective | 4 | | |
| Semester Totals | 16 hrs | | 12 hrs |

Total Hours: 124

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

# CRIMINOLOGY AND CRIMINAL JUSTICE

## School of Urban Affairs and Public Policy

## Department of Criminology and Criminal Justice

## Criminology and Criminal Justice Major (B.A.)

### A. University General Education Program (48 - 51 hours)

See page 57 for the University General Education Program requirements.

### B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed on page 67.

### C. The Major (37 hours)

Completion of 37 semester hours of criminology and criminal justice including CJUS 1100, 3129 [C], 3130, 3510, 3521, 3540 and 4110 [I, W], plus either (1) 15 additional upper division hours in criminology and criminal justice, or (2) 12 additional upper division hours in criminology and criminal justice and CJUS 2110 or 2120 as approved by the departmental advisor. Students will be allowed no more than 6 hours of credit toward the degree in non-classroom courses such as internships and individual directed studies.

### D. Electives

Electives may be chosen to bring the total number of hours to 124.

### E. Computer Literacy

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

## Criminology and Criminal Justice Minor

Completion of 18 hours in criminal justice courses including CJUS 1100, 3521, 3540, and 3510.

## Typical 4-Year Criminology and Criminal Justice Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| CJUS 1100 | 3 | COMP 1200 | 4 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Social Science* | 3 | MATH* | 3 |
| Semester Totals | 15 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| Literary Heritage* | 3 | Nat. Sci./Math/B.A. | 3-4 |
| MATH * | 3 | HMSE 1100 | 2 |
| Fine Arts Heritage* | 3 | Natural Science* | 4 |
| Natural Science* | 4 | CJUS 3521 | 3 |
| American Heritage* | 3 | CJUS 2110 or 2120 | 3 |
| Semester Totals | 16 hrs | | 15-16 hrs |
| **Junior Year** | | | |
| American Heritage* | 3 | Humanities/B.A. | 3 |
| Social Science/B.A. | 3 | CJUS 3540 | 3 |
| CJUS 3129 [C] | 4 | Upper division elective | 3 |
| CJUS 3130 | 3 | Fine Arts Heritage/B.A. | 3 |
| COMM 2381 | 3 | PHED* | 2 |
| | | CJUS 3510 | 3 |
| Semester Totals | 16 hrs | | 17 hrs |
| **Senior Year** | | | |
| Upper division CJUS | 3 | Upper division CJUS | 3 |
| Upper division CJUS | 3 | Upper division CJUS | 3 |
| Upper division CJUS | 3 | CJUS 4110 [I,W] | 3 |
| Elective | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |

Total Hours: 125-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

# ECONOMICS

## Department of Economics

The Department of Economics is located in the Fogelman College of Business and Economics.

## Economics Major (B.A.)

### A. University General Education Program (48 - 51 hours)

See page 57 for the University General Education Program requirements.

### B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed on page 67.

### C. The Major (30 hours)

Completion of 30 semester hours, including ECON 2110, 2120, 3310, 3320, 4920, and 15 additional upper division semester hours in economics courses as approved by the department advisor.

### D. Electives

Electives may be chosen to bring the total number of hours to 124.

### E. Computer Literacy

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

### F. Honors Program

All students who receive a grade of B or better in ECON 2110 or 2120 honors sections are eligible for the honors program. Entry to the program can also be obtained through the recommendation of a member of the faculty to the Economics Departmental Honors Committee. A student must maintain an average grade of at least 3.25 in economics to continue in the program and must have an average grade of 3.5 or better in economics to graduate with honors in economics.

Honor students take special courses during the junior and senior years, particularly the honors sections of ECON 3310 and 3320, and write a senior research paper. Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in Economics". Moreover the student's diploma and the record at The University of Memphis will reflect this accomplishment. Details of the program are available in the Economics Department office.

## Typical 4-Year Economics Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Fine Arts Heritage* | 3 | MATH/B.A. | 3-4 |
| Elective | 3 | American Heritage* | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Semester Totals | 16 hrs | | 16-17 hrs |
| **Sophomore Year** | | | |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Literary Heritage* | 3 | American Heritage* | 3 |
| Fine Arts Heritage/B.A. | 3 | MATH* | 3-4 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| Social Science/B.A. | 3 | COMM 2381 | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 17 hrs | | 17-18 hrs |
| **Junior Year** | | | |
| Humanities/B.A. | 3 | Upper division elective | 3 |
| Upper division elective | 3 | Upper division elective | 3 |
| Writing Intensive [W] | 3 | Elective | 3 |
| Computational Intensive[C] | 3 | ECON 3320 | 3 |
| ECON 3310 | 3 | Upper division ECON | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| **Senior Year** | | | |
| Elective | 3 | Upper division ECON | 3 |
| ECON 4920 [I] | 3 | Integrative elective | 3 |
| Upper division ECON | 3 | Upper division ECON | 3 |
| Elective | 3 | COMP 1200 | 4 |
| Elective | 3 | | |
| Semester Totals | 15 hrs | | 13 hrs |

Total Hours: 124

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

# ENGLISH

## Department of English

## English Major (B.A.)

### A. University General Education Program (48 - 51 hours)

See page 57 for the University General Education Program requirements.

### B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed on page 67.

### C. The Major (36 hours)

1. *Major Core:* Completion of 21 semester hours in English courses (chosen with approval of departmental advisor), including ENGL 1010, 1020; 2201 or 2202 (these courses are included in the University General Education Program requirements), ENGL 3210, 3220, and 3321; one course from ENGL 3501, 3511, 3701, 4501, 4602, 4604, 4605. Students in the Creative Writing Concentration must take either ENGL 4604 or 4605. (See Note 2.)
2. *Concentration (12 hours)*
   a. *Creative Writing Concentration:* 12 semester hours including ENGL 3606 and 3607; 6 hours in ENGL 4601, or 6 hours in ENGL 4603; and 3 upper division elective hours in English courses.
   b. *English As A Second Language Concentration:* Choose 12 hours from ENGL 4100-4109 (only in ESL), 4530, 4531, 4532, 4533, 4900 (only in ESL). With approval of advisor, a maximum of 6 hours in Language and Linguistics courses may be substituted for ESL courses.
   c. *Language and Linguistics Concentration:* Choose 12 hours from ENGL 3501, 3511, 3521, 4501-4521, 4540-4550, 4900 (only in language).
   d. *Literature Concentration:* Choose 12 hours from ENGL 3100-3119 (only in literature) 3211-3214, 3221-3224, 3322-3412, 3701, 4001-4002 (only in literature), 4100-4109 (only in literature), 4231-4471, 4711; 4900 (only in literature).
   e. *Professional Writing Concentration:* Choose 12 hours from ENGL 3601, 3602, 3604, 4100-09 (only in professional writing), 4602, 4606-4615, 4616, 4617, 4630, 4900 (only in professional writing); students are encouraged to select an additional course from this list as the elective in C3 below.
3. *Electives:* 3 hours of upper division ENGL courses.

   *Note the following:*

   (1) Students should see the English advisor who will assist students in developing an appropriate program of studies.

   (2) Courses taken to satisfy the core requirements may not be used to satisfy concentration requirements.

   (3) No more than a total of six (6) hours in ENGL 3100-09, ENGL 4100-09, and ENGL 4900 may be applied to the English major.

   (4) Students who wish to satisfy the requirements for both the English major and the endorsement to teach English in high school should consult the College of Education for licensure requirements.

### D. Electives

Electives may be chosen to bring the total number of hours to 124.

### E. Computer Literacy

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

### F. Honors Program

Honors sections of the required English courses on the freshman and sophomore levels (ENGL 1010, 1020, 2201, 2202) are offered through the University Honors program and are open to qualified students regardless of their major. On the junior and senior level, the Department of English offers an honors track open only to English majors, who are eligible to apply for admission to the program if they have a grade point average of 3.25 in their overall studies and in English. Honors students take special courses during their junior and senior years and write a senior honors thesis. Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in English." Moreover, the student's diploma and the record at The University of Memphis will reflect this distinction. Details of the program are available at the English Department office.

## English Minor

Completion of 12 upper division hours in English.

## Typical 4-Year English Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| COMP 1200 | 4 | HMSE 1100 | 2 |
| American Heritage* | 3 | American Heritage* | 3 |
| Semester Totals | 17 hrs | | 15 hrs |
| **Sophomore Year** | | | |
| Literary Heritage* | 3 | ENGL 3210 | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Elective | 3 | Elective | 3 |
| MATH* | 3-4 | Elective | 3 |
| COMM 2381 | 3 | Fine Arts Heritage* | 3 |
| | | PHED* | 2 |
| Semester Totals | 15-16 hrs | | 17 hrs |
| **Junior Year** | | | |
| ENGL 3220 | 3 | ENGL 3321 | 3 |
| ENGL conc. elective | 3 | ENGL conc. elective | 3 |
| Social Science* | 3 | Social Science* | 3 |
| Nat. Sci./Math/B.A. | 3-4 | Fine Arts Heritage/B.A. | 3 |
| Writing Intensive [W] | 3 | Computational Intensive[C] | 3 |
| Semester Totals | 15-16 hrs | | 15 hrs |
| **Senior Year** | | | |
| ENGL core elective | 3 | Elective | 3 |
| ENGL conc. elective | 3 | ENGL conc. elective | 3 |
| Social Science/B.A. | 3 | Humanities/B.A. | 3 |
| Integrative [I] | 3 | Upper division elective | 3 |
| Upper division elective | 3 | Upper division elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |

Total Hours: 124-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

# ENVIRONMENTAL STUDIES

## Interdisciplinary Studies Office

## Environmental Studies Minor

The Interdisciplinary Environmental Studies Minor Program is intended to provide all students with the opportunity to obtain a broad-based knowledge of the environmental issues facing our planet, knowledge that spans both the biological-physical threats and solutions as well as behavioral-social-economic implications. One core course (INTD 2100-Introduction to Environmental Studies) is required of all students.

**The Minor:** The student must pass INTD 2100 with a minimum grade of "C" and complete 5 additional environmentally related courses (15-20 semester hours) from the two groups of courses listed below as approved by the University's Environmental Research, Issues, and Programs Committee (ERIPC). At least 2 courses must be selected from each group and 5 courses from 4 different departments.

**GROUP 1:** BIOLOGICAL-PHYSICAL EMPHASIS: BIOL 3050, 4002, 4055, 4060, 4100, MMCS 4450, CHEM 4001, CIVL 4143, 4144, GEOG 3221, 4201, 4211, 4231, PHYS 3410, INTD 4100-4110.

**GROUP 2:** SOCIO-BEHAVIORAL EMPHASIS: ANTH 4111, ECON 4260, HIST 4861, ICL 4601, PSYC 3501, SLS 3202, SOCI 4641, INTD 4120-4130.

**NOTE:** If a faculty member wishes for a course such as a Special Topics course to be included in the Interdisciplinary Environmental Minor in a given semester, then, with the approval of the ERIPC, the course may be offered within the instructor's department or as either INTD 4100-4110 or INTD 4120-4130, whichever is appropriate. Students taking ERIPC-approved courses that do not appear in the catalog will be given a letter to present to their graduation analyst indicating that those courses have been approved. Information pertaining to the minor and other environmental initiatives may be obtained in room 213, Mitchell Hall.

# FOREIGN LANGUAGES

## Department of Foreign Languages and Literatures

## Foreign Languages Major (B.A.)

### A. University General Education Program (48 - 51 hours)

See page 57 for the University General Education Program requirements.

### B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed on page 67.

### C. The Major (24-33 hours)

Successful completion of one of the following concentrations:

1. A single-language concentration in French, German, Latin, *Russian or **Spanish: 24 upper division semester hours.
2. A two-language concentration chosen from French, German, Greek, Latin, Russian, and Spanish: 27 upper division semester hours with a minimum of 9 semester hours in each language.
3. A three-language concentration: All three language concentrations require prior consultation with the approval of the department chair. Plans will normally include at least 33 upper division semester hours to include at least 12 semester hours in each of two languages plus approved course work in a third language.

NOTE: Majors are encouraged to take Literary Criticism, LALI 4890, as an Integrative course.

NOTE: With the approval of the Head of the Classics Section, up to 6 credit hours in upper division Classics courses may be applied toward a concentration in Greek or Latin.

Foreign Language majors who minor in International Business are encouraged to include Advanced Composition and Conversation (6 hours) and two courses for commerce (6 hours) as part of their major.

* A concentration in Russian requires a collateral foreign language concentration or a collateral major outside the Department of Foreign Languages and Literatures.

** Students with a single-language concentration in Spanish must take SPAN 4410 and 4510.

### D. Electives

Electives may be chosen to bring the total number of hours to 124.

### E. Computer Literacy

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

## Foreign Languages Minor

Completion of 18 semester hours consisting of (1) courses numbered 1020, 2010, and either 2020 or 2021 (or their equivalents) in the foreign language in which upper division hours are to be taken, and (2) 9 upper division semester hours in one of the following languages: Chinese, French, German, Greek, Italian, Japanese, Latin, Russian, or Spanish.

### Typical 4-Year French Concentration Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH* | 3-4 | MATH*(if needed) | 3 |
| Social Science* | 3 | Social Science* | 3 |
| Fine Arts Heritage* | 3 | HMSE 1100 | 2 |
| FREN 2010 | 3 | FREN 2020 | 3 |
| | | PHED* | 2 |
| Semester Totals | 15-16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| COMM 2381 | 3 | Literary Heritage* | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Fine Arts Heritage/B.A. | 3 | FREN 3302 | 3 |
| FREN 3301 | 3 | FREN 3411 | 3 |
| Semester Totals | 16 hrs | | 16 hrs |
| **Junior Year** | | | |
| American Heritage* | 3 | American Heritage* | 3 |
| Nat. Sci./Math/B.A. | 3-4 | Social Science/B.A. | 3 |
| FREN 3401 | 3 | COMP 1200 | 4 |
| Writing Intensive [W] | 3 | Upper division FREN | 3 |
| Computational Intensive[C] | 3 | Elective | 3 |
| Semester Totals | 15-16 hrs | | 16 hrs |
| **Senior Year** | | | |
| LALI 4890 [I] | 3 | Upper division FREN | 3 |
| Upper division FREN | 3 | Upper division FREN | 3 |
| Upper division elective | 3 | Upper division elective | 3 |
| Upper division elective | 3 | Upper division elective | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |

Total Hours: 124-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

### Typical 4-Year Spanish Concentration Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH* | 3-4 | MATH* (if needed) | 3 |
| Social Science* | 3 | Social Science* | 3 |
| SPAN 2010 | 3 | SPAN 2020 | 3 |
| Elective | 3 | HMSE 1100 | 2 |
| | | PHED* | 2 |
| Semester Totals | 15-16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| COMM 2381 | 3 | Literary Heritage* | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| SPAN 3301 | 3 | SPAN 3303 | 3 |
| Elective | 3 | SPAN 3311 | 3 |
| Semester Totals | 16 hrs | | 16 hrs |
| **Junior Year** | | | |
| Fine Arts Heritage* | 3 | Fine Arts Heritage/B.A. | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| Nat. Sci./Math/B.A. | 3-4 | Social Science* | 3 |
| SPAN 3313 | 3 | SPAN 3312 | 3 |
| ENGL 3604 [W,C] | 3 | COMP 1200 | 4 |
| Semester Totals | 15-16 hrs | | 16 hrs |
| **Senior Year** | | | |
| LALI 4890 [I] | 3 | SPAN 4510 | 3 |
| SPAN 4410 | 3 | Upper division elective | 3 |
| Upper division SPAN | 3 | Upper division elective | 3 |
| Upper division elective | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |

Total Hours: 124-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

# GEOGRAPHY

## Department of Earth Sciences

## Geography Major (B.A.)

### A. University General Education Program (48 - 51 hours)

See page 57 for the University General Education Program requirements.

### B. College and Degree Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed on page 67.

### C. The Major (35 hours)

1. *Core Requirements (20 hours):*
   a. *Environmental and Earth Science:* GEOG 1010/1011, 1020/1021 (8)
   b. *Human:* GEOG 1401 or 3430 (3)
   c. *Regional:* GEOG 1301 or any 43_numbered course (3)
   d. *Geographic Techniques:* GEOG 4502 (3)
   e. GEOG 4801(3) [I, W]
2. *Concentration (15 hours):*
   a. *Geography:* Choose 15 semester hours of geography with a minimum of 12 upper division hours.
   b. *Environmental and Earth Science:* 15 semester hours, with a minimum of 12 hours selected from GEOG 3221, 4120, 4122, 4201, 4211, 4231, 4241, 4251.
   c. *Geographic Techniques:* 15 semester hours, with a minimum of 12 hours selected from GEOG 3501, 4510, 4511, 4515, 4521, 4525, 4531.
   d. *Urban Planning:* (1) Required core (9 semester hours): GEOG 3451, 4431, 4551; (2) Guided electives (6 semester hours): two of the following: GEOG 3430, 4201, 4231, 4443, 4531, 4700.

### D. Electives

Electives may be chosen to bring the total number of hours to 124.

### E. Computer Literacy

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

## Typical 4-Year Geography (B.A.) Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| GEOG 1010/1011 | 4 | GEOG 1020/1021 | 4 |
| MATH* | 3-4 | MATH* (if needed) | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| Fine Arts Heritage* | 3 | Fine Arts Heritage/B.A. | 3 |
| Semester Totals | 15-16 hrs | | 15 hrs |
| **Sophomore Year** | | | |
| GEOG 1301 or 43xx | 3 | Nat. Sci./Math/B.A. | 3-4 |
| Literary Heritage* | 3 | COMM 2381 | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| COMP 1200 | 4 | American Heritage* | 3 |
| Semester Totals | 16 hrs | | 15-16 hrs |
| **Junior Year** | | | |
| GEOG 1401 or 3430 | 3 | American Heritage* | 3 |
| GEOG 4502 | 3 | GEOG conc. elective | 3 |
| Computational Intensive[C] | 3 | | |
| Social Science* | 3 | Humanities/B.A. | 3 |
| Elective | 3 | Social Science/B.A. | 3 |
| | | GEOG conc. elective | 3 |
| Semester Totals | 15 hrs | | 18 hrs |
| **Senior Year** | | | |
| GEOG conc. elective | 3 | GEOG 4801[I,W] | 3 |
| GEOG conc. elective | 3 | Upper division elective | 3 |
| Elective | 3 | Elective | 3 |
| Upper division elective | 3 | Upper division elective | 3 |
| GEOG conc. elective | 3 | Upper division elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |

Total Hours: 124-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

## Geography Major (B.S.)

### A. University General Education Program (48 - 49 hours)

See page 57 for the University General Education Program requirements. Note that MATH 1830 or 1910 is required for the B.S. degree.

### B. College and Degree Requirements (15-16 hours)

The College and Bachelor of Science requirements are in addition to the University General Education Program requirements and are listed on page 68.

### C. The Major (35 hours)

1. *Core Requirements (20 hours):*
   a. *Environmental and Earth Science:* GEOG 1010/1011, 1020/1021 (8)
   b. *Human:* GEOG 1401 or 3430 (3)
   c. *Regional:* GEOG 1301 or any 43_numbered course (3)
   d. *Geographic Techniques:* GEOG 4502 (3)
   e. GEOG 4801(3) [I, W]
2. *Concentration (15 hours):*
   a. *Geography:* Choose 15 semester hours of geography with a minimum of 12 upper division hours.
   b. *Environmental and Earth Science:* 15 semester hours, with a minimum of 12 hours selected from GEOG 3221, 4120, 4122, 4131, 4201, 4211, 4231, 4241, 4251. In lieu of a minor, students in this concentration may opt to take the following three science sequences (24 hours):
      BIOL/MMCS 1110/1111, BIOL 1120/1121.
      CHEM 1110/1111, 1120/1121.
      PHYS 2010/2011, 2020/2021.
   c. *Geographic Techniques:* 15 semester hours, with a minimum of 12 hours selected from GEOG 3501, 4510, 4511, 4515, 4521, 4525, 4531.
   d. *Urban Planning:* (1) Required core (9 semester hours): GEOG 3451, 4431, 4551; (2) Guided electives (6 semester hours): two of the following: GEOG 3430, 4201, 4231, 4442, 4443, 4531, 4700.
3. *Minor*

Students majoring in geography for the Bachelor of Science degree must complete a minor in either biology, chemistry, computer sciences, geological sciences, mathematical sciences, or physics. This requirement does not apply to geography majors in the environmental or earth science concentrations who opt to take 24 credit hours in natural sciences, 8 hours from each of the following: biological sciences, chemistry, and physics.

### D. Electives

Electives may be chosen to bring the total number of hours to 124.

### E. Computer Literacy

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

## Geography Minor

Completion of 20 semester hours in geography courses, at least 9 of which must be upper division hours.

## Park Ranger Training

GEOG 4271 and 4272 compose an eight-month training program in park resource protection and visitor management that prepares students for seasonal employment as rangers in the National Park Service and state park service. The program is coordinated by the Department of Geography.

## Typical 4-Year Geography (B.S.) Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| GEOG 1010/1011 | 4 | GEOG 1020/1021 | 4 |
| MATH 1830 or 1910 | 3-4 | COMM 2381 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Fine Arts Heritage* | 3 | Hist/Phil Heritage* | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 15-16 hrs | | 15 hrs |
| **Sophomore Year** | | | |
| GEOG 1301 or 43xx | 3 | American Heritage* | 3 |
| Literary Heritage* | 3 | Foreign Language/B.S. | 3 |
| Hist/Phil Heritage* | 3 | GEOG minor elective | 3 |
| Foreign Language/B.S. | 3 | Humanities/B.S. | 3 |
| COMP 1200 | 4 | Nat. Sci./Math/B.S. | 3-4 |
| Semester Totals | 16 hrs | | 15-16 hrs |
| **Junior Year** | | | |
| GEOG 1410 or 3430 | 3 | GEOG conc. elective | 3 |
| GEOG 4502 | 3 | GEOG conc. elective | 3 |
| GEOG conc. elective | 3 | Social Science* | 3 |
| American Heritage* | 3 | Social Science/B.S. | 3 |
| GEOG minor elective | 3-4 | GEOG minor elective | 3-4 |
| Semester Totals | 15-16 hrs | | 15-16 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| Computational Intensive[C] | 3 | GEOG 4801 [W,I] | 3 |
| GEOG conc. elective | 3 | GEOG conc. elective | 3 |
| GEOG minor elective | 3 | GEOG minor elective | 3 |
| GEOG minor elective | 3 | Upper division elective | 3 |
| Upper division elective | 3 | Upper division elective | 3 |
| | | GEOG minor elective | 3 |
| Semester Totals | 15 hrs | | 18 hrs |

Total Hours: 124-128

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

# GEOLOGICAL SCIENCES

## Department of Earth Sciences

## Geological Sciences Major (B.S.)

**A. University General Education Program (48 - 49 hours)**

See page 57 for the University General Education Program requirements. Note that MATH 1830 or MATH 1910 is required for the B.S. degree.

**B. College and Degree Requirements (18-19 hours)**

The College and Bachelor of Science requirements are in addition to the University General Education Program requirements and are listed on page 68.

**C. The Major (40-51 hours in addition to University General Education Program and B.S. degree requirements)**

1. *Core Requirements (22 hours):* Completion of GEOL 1040, 3311, 3312, 3512 [C], and 4622 [I].
2. *Concentration:*
   a. *Geology (18 hours):* GEOL 1050 or 1103 (4), 3211 [W], 3712, and additional upper division semester hours as approved by the advisor to a total of 36 semester hours in Geological Sciences; CHEM 1110/1111, 1120/1121; MATH 1910 (these courses are included in the University General Education Program requirements); PHYS 2010/2011, 2020/2021 or PHYS 2110/2111, 2120/2121 (four hours of these courses are included in the B.S. degree requirements).
   b. *Geophysics (29 hours):* GEOP 4101, 4201, 4401 and additional upper division semester hours to total 36 semester hours in Geological Sciences; MATH 1910 (this course is included in the University General Education Program requirements), MATH 1920, 2110, 3120; PHYS 2110/2111, 2120/2121 (four hours of these courses are included in the B.S. degree requirements).

**D. Electives**

Electives may be chosen to bring the total number of hours to 124.

**E. Computer Literacy**

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

## Geological Sciences Minor

A minimum of 18 semester hours in geology courses, including GEOL 1050 or GEOL 1103. Six of these hours must be selected from upper division courses.

## Typical 4-Year Geology Concentration Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| GEOL 1040 | 4 | GEOL 1050 or 1103 | 4 |
| COMP 1200 | 4 | Foreign Language/B.S. | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| Foreign Language/B.S. | 3 | MATH 1830 or 1910 | 3-4 |
| Semester Totals | 16 hrs | | 15-16 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| CHEM 1110/1111 | 4 | CHEM 1120/1120 | 4 |
| GEOL 3311 | 4 | GEOL 3312 | 4 |
| COMM 2381 | 3 | Literary Heritage* | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| | | Fine Arts Heritage* | 3 |
| Semester Totals | 14 hrs | | 17 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| American Heritage* | 3 | American Heritage* | 3 |
| PHYS 2010 or 2110 | 3 | PHYS 2020 or 2120 | 3 |
| PHYS 2011 or 2111 | 1 | PHYS 2021 or 2121 | 1 |
| GEOL 3712 | 4 | GEOL 3512 [C] | 4 |
| Humanities/B.S. | 3 | Social Science* | 3 |
| Semester Totals | 14 hrs | | 14 hrs |

**Summer**

| | |
|---|---|
| GEOL 4622 [I] | 6 |

**Senior Year**

| | | | |
|---|---|---|---|
| Upper division elective | 3 | Social Science/B.S. | 3 |
| GEOL 3211 [W] | 4 | Upper division GEOL | 3-4 |
| Social Science* | 3 | Upper division elective | 3 |
| Upper division GEOL | 3-4 | Upper division elective | 3 |
| | | Elective | 3 |
| Semester Totals | 13-14 hrs | | 15-16 hrs |

Total Hours: 124-127

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

# HISTORY

## Department of History

The Department of History introduces students to the richness and complexity of the human experience through a curriculum that covers all major geographic areas and time periods, and emphasizes both the unity of that experience and the diversity resulting from such factors as cultural, social, and gender differences. We seek to develop not only a knowledge of the past, but also an appreciation of history as an intellectual discipline that employs a wide variety of scholarly methodologies in its effort to understand that past. Students are taught to think and work as historians: to read critically and analytically both primary and secondary sources, to appreciate the complexity of historical issues and multiplicity of historical views, and to investigate a historical question or problem and com-

municate the results of that investigation. Through this broad preparation, history majors acquire essential knowledge and critical skills, which provide valuable assets for a wide spectrum of professions and occupations as well as the fundamental basis for advanced study. All candidates for graduation at The University of Memphis are required to complete History 2010 or 2020.

## History Major (B.A.)

**A. University General Education Program (48 - 51 hours)**

See page 57 for the University General Education Program requirements.

**B. College and Degree (B.A.) Requirements (18-19 hours)**

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed on page 67.

**C. The Major (33 hours)**

Completion of 33 semester hours in history courses, including HIST 1110, 1120, 2010, 2020, and 21 additional upper division semester hours. Of the 21 upper division hours required for the major, a maximum of 12 may be taken in any one field (United States, Latin American, Ancient/Byzantine, European, Russian, Far Eastern, Middle Eastern, African).

**D. Electives**

Electives may be chosen to bring the total number of hours to 124.

**E. Computer Literacy**

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

**F. Honors Program**

History majors who have attained junior standing, successfully completed six semester hours of lower division history, and maintained a grade point average of at least 3.25 in overall studies and in history courses taken, are eligible for admission to the honors program in history. Students admitted to the program must take 18 hours of honors work, at least 12 of which must be taken in upper division history courses after admission to the departmental program. These 12 hours must include HIST 4003 or 4999 and 4996. Those who successfully complete the program and the regular B.A. requirements will have their degree conferred "With Honors in History." The student's diploma and the record at The University of Memphis will be similarly endorsed. A detailed description of the program, together with application forms for admission, may be obtained in the History Department office.

## History Minor

Completion of 21 semester hours in history courses, including HIST 1110, 1120, 2010, 2020, and 9 additional upper division semester hours.

## Typical 4-Year History Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH* | 3-4 | MATH* (if needed) | 3 |
| HIST 1110 | 3 | HIST 1120 | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Social Science* | 3 | HMSE 1100 | 2 |
| | | PHED* | 2 |
| Semester Totals | 15-16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| Literary Heritage* | 3 | COMM 2381 | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Fine Arts Heritage* | 3 | Social Science* | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 16 hrs | | 16 hrs |
| **Junior Year** | | | |
| Social Science/B.A. | 3 | Fine Arts Heritage/B.A. | 3 |
| Humanities/B.A. | 3 | COMP 1200 | 4 |
| Nat. Sci./Math/B.A. | 3-4 | Upper division HIST | 3 |
| Upper division HIST | 3 | Upper division HIST | 3 |
| Upper division HIST | 3 | Upper division [W] | 3 |
| Semester Totals | 15-16 hrs | | 16 hrs |
| **Senior Year** | | | |
| Upper division HIST | 3 | Upper division HIST [I] | 3 |
| Upper division HIST | 3 | Upper division elective | 3 |
| Upper division [C] | 3 | Upper division elective | 3 |
| Upper division elective | 3 | Upper division elective | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |

Total Hours: 124-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

# INTERNATIONAL STUDIES

## Interdisciplinary Studies Office

The International Studies program provides the opportunity to bring the knowledge of several traditional disciplines to bear upon a focal point of human relationships and problems that cross national and cultural boundaries. The program is designed to serve the student who seeks knowledge of the range of contemporary and possible future problems that confront international society and an understanding of alternative national and cultural perspectives on solutions to those problems. The program also serves the needs of students planning a career in the Foreign Service or related agencies of the federal government and students preparing for employment abroad in the private sector, or in international organizations, private or public.

International Studies is offered as a major only. The program emphasis is on the course work in history, political science, economics, and geography, with contributions from other social science disciplines and art. Within the program, the student is required to concentrate a part of the work in the field of American foreign policy or in one of five areas of the world. Students are encouraged to pursue the study of a foreign language and to seek opportunities for travel and study abroad. The student's program should be planned in consultation with the Director of International Studies.

## International Studies Major (B.A.)

**A. University General Education Program (48 - 51 hours)**

See page 57 for the University General Education Program requirements. Note the following is recommended for the International Studies major: *Social Science* - ECON 2120.

**B. College and Degree (B.A.) Requirements (18-19 hours)**

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed on page 67.

**C. The Major (39 hours)**

1. *Core requirements (24 hours)*
   ECON 4350; POLS 1501 and 4508; HIST 4260; INTL 4601; at least one course in International Political Processes (POLS 3505, 3509[W], or 4504); at least one course in International Economic Processes (ECON 3580 or 4340, GEOG 3430, or POLS 4510): at least one course in International Development Processes (ANTH 3711, ECON 3580, or SOCI 2100 or 4641)
2. *Concentration (9 hours)*
   Choose three courses, in at least two disciplines, from one of the following areas of concentration:
   a. *Africa and the Middle East:* ANTH 3242; HIST 3273, 3274, 3275, 3280, 4272, 4273, 4285, 4286, 4287; POLS 3304, 3309.
   b. *American Foreign Policy;* HIST 3803, 3811; POLS 1301, 3506, 4506.
   c. *Asia:* ECON 3010; GEOG 4306; HIST 3290, 3291, 4292, 4294, 4295; PHIL 3721; POLS 4307, 4312; SOCI 4642.
   d. *Latin America:* ANTH 3232; ARTH 4162, 4163; GEOG 4324, 4325; HIST 3211, 3212, 4240; POLS 3306.
   e. *Russia and Eastern Europe:* HIST 4160, 4162; POLS 4305, 4502.
   f. *Western Europe:* GEOG 4304; HIST 3302, 3506, 4145, 4200, 4461; POLS 3302.
3. *Foreign Language (6 hours)*
   In addition to the Bachelor of Arts language requirement, completion of an additional six hours in that same language at the 3000 level or higher.

**D. Electives**

Electives may be chosen to bring the total number of hours to 124.

**E. Computer Literacy**

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

## Asian Studies Minor

A minimum of 18 semester hours, including CHIN 2010 and 2020, or JAPN 2010 and 2020, 6 semester hours from CHIN 4301, HIST 3290, 3291, 4292, 4294, 4295, LALI 3401, or PHIL 3721, and 6 semester hours from ECON 3010, GEOG 4306, POLS 4307, 4312, or SOCI 4642.

## Typical 4-year International Studies Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| MATH* | 3-4 | MATH* (if needed) | 3 |
| POLS 1501 | 3 | ECON 2120, recommended | 3 |
| | | HMSE 1100 | 2 |
| Semester Totals | 15-16 hrs | | 17 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| American Heritage* | 3 | American Heritage* | 3 |
| Fine Arts Heritage* | 3 | Literary Heritage* | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Foreign Language, 3xxx | 3 | Foreign Language, 3xxx | 3 |
| COMP 1200 | 4 | COMM 2381 | 3 |
| Semester Totals | 17 hrs | | 16 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| POLS 4508 | 3 | Fine Arts Heritage/B.A. | 3 |
| Social Science/B.A. | 3 | Nat. Sci./Math/B.A. | 3-4 |
| Elective [C] | 3-4 | PHED* | 2 |
| HIST 4260 | 3 | Intl. Econ. Processes | 3 |
| Intl. Pol. Processes | 3 | Intl. Dev. Processes | 3 |
| Semester Totals | 15-16 hrs | | 14-15 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| INTL 4601 [W,I] | 3 | INTL conc. elective | 3 |
| INTL conc. elective | 3 | INTL conc. elective | 3 |
| Humanities/B.A. | 3 | Upper division elective | 3 |
| Upper division elective | 3 | ECON 4350 | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |

Total Hours: 124-127

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

## Bornblum Judaic Studies (B.L.S.)

The Bachelor of Liberal Studies in Bornblum Judaic Studies is granted through University College and the program is administered through the College of Arts and Sciences.

Bornblum Judaic Studies explores the experience of the Jewish people within the contexts of world cultures. Non-theological in its orientation, it provides students the opportunity to study related areas, including the history of the Jewish people, the structures and politics of Jewish communities, the Hebrew and Arabic languages, and the religious, intellectual, and aesthetic traditions of the Jewish people.

**A. LOWER DIVISION CORE**

Hebrew Language Core (12 hours): HEBR 1010, 1020, 2010, 2020
Religious Studies Core (3 hours):UNIV 2850

**B. UPPER DIVISION CORE (12 hours)**

JDST 3801, 3802

**C. UPPER DIVISION ELECTIVES (15 hours)**

Jewish Heritage (Choose two or three): ENGL 4661; HIST 3275; JDST 3661, 4841, 4671

Israel (Choose one or two): JDST 4820, 4830, 4840

With the permission of the Director of Bornblum Judaic Studies, students may substitute the following courses for two courses listed under C, or they may be used as part of the electives listed below: JDST 4750-4799, 4990

**D. INTERDISCIPLINARY ELECTIVES (9 Hours)**

ANTH 4253; ARTH 4121; HIST 4272, 4320; PHIL 3701, 4711; POLS 3102; SOCI 3860

**E. THEMATIC STUDIES (6 Hours)**

UNIV 35xx, 45xx; it is recommended that two of the following courses be taken to complete the Thematic Studies requirement:

UNIV 3850, 3581; JDST 4511

**F. Special Project (6 or 9 Hours)**

UNIV 4990, 4995

## Judaic Studies Minor

The minor in Judaic Studies is designed to provide students in any department in the University with a sense of the origins and foundations of Western values and traditions. There is no Hebrew language requirement for the minor.

## REQUIREMENTS FOR JUDAIC STUDIES MINOR

**A. Lower Division Core (3 hours)**

UNIV 2850

**B. Upper Division Core (3 hours)**

JDST 3201, 3202, 3801, 3802

**C. Upper Division Electives (6 hours)**

Jewish Heritage (3 hours): UNIV 3580; JDST 4551, 3661, 4671, 4511; Israel (3 hours): JDST 4820, 4830, 4840

**D. General Electives (6 hours)**

ARTH 4121; POLS 3102; UNIV 3580; SOCI 3860; ENGL 4461; PHIL 4711

With the permission of the Director of Bornblum Judaic Studies, students may substitute up to two courses in any category listed above. Such courses will have substantial Judaic Studies content.

# LEGAL THOUGHT AND LIBERAL ARTS

## Interdisciplinary Studies Office

## Legal Thought and Liberal Arts Minor

The minor in Legal Thought and Liberal Arts is designed to provide an interdisciplinary liberal arts program for students who intend to enter the legal profession. The minor will be of particular benefit to pre-law students whose majors are more professional in nature and who are not exposed to the broader liberal arts curriculum. Students will be introduced to major intellectual traditions of the West and to ethical, social, and economic issues of significance to our time. The courses in the minor require that students read critically, think logically, and write clearly, attributes required of persons in the legal profession. Students wishing to minor in Legal Thought and Liberal Arts should contact the pre-professional advisor in room 209 Mitchell Hall.

**The Minor:**
**18 semester hours of required courses and electives:**

A. Required Core Courses: PHIL 1611 and one of the following: ENGL 3604, 4231, 4232, 4234, 4235, 4236.

B. Electives: Select one course from each of the following groups:
(1) Economic Context of the Law: ECON 2110, 2120, 4130.
(2) Historical Context of the Law: HIST 3121, 3506, 3840.
(3) Practical Foundations of Jurisprudence: CJUS 3510; POLS 4212, 4405.
(4) Theoretical Foundations of Jurisprudence: PHIL 3511, 4551; POLS 3401, 3402, 3405.

# MATHEMATICAL SCIENCES

## Department of Mathematical Sciences

## Mathematical Sciences Major (B.S.)

**A. University General Education Program (48 hours)**

See page 57 for the University General Education Program requirements. Note the following requirements specified for the Mathematical Sciences major: *Mathematics*: MATH 1910; *Natural Science*: CHEM 1110/1111, 1120/1121 or PHYS 2110/2111, 2120/2121.

**B. College and Degree (B.S.) Requirements (15-16 hours)**

The College and Bachelor of Science requirements are in addition to the University General Education Program requirements and are listed on page 68.

**C. The Major (35-36 hours in addition to University General Education Program and B.S. degree requirements)**

1. *Major Core (14 hours):*
Completion of MATH 1910 (this course is included in the University General Education Program requirements), MATH 1920, 2110, 2702, and 3242 [C] (majors are encouraged to consider the departmental honors program described below); plus the following courses: CHEM 1110/1111, and 1120/1121 or PHYS 2110/2111, 2120/2121. (these courses are included in the University General Education Program requirement).
2. *Concentration (21 -22 hours):*
a. *Mathematics (21-22 hours):* COMP 1900 or COMP 4001 and 18 semester hours of upper division courses with departmental approval. The following are examples of approved course selections.
(1) *Applied Mathematics*: MATH 3120, 4391, 4635, 4721, and six upper division hours from the following: MATH 3221, 4242, 4261, 4350 [W], 4351, 4361, 4392, 4640.
(2) *General Mathematics*: MATH 3120, 4350 [W], 4261, 4635, and 6 upper division hours chosen from: MATH 3221, 4242, 4351, 4361, 4391, 4411, 4636, 4721.
(3) *Graduate Study in Mathematics:* MATH 4261, 4350 [W], three courses chosen from: MATH 4242, 4351, 4361, 4411, and one additional course from: MATH 3120, 3221, 4242, 4351, 4361, 4391, 4411, 4635.
(4) *Teacher Licensure in Secondary Education:* MATH 3221, 3581, 4151, 4261, 4635, and either MATH 4636, or 4637.

NOTE: All approved programs will include no more than 9 semester hours chosen from MATH 4607, 4635, 4636, 4637, 4640. Students are encouraged to work with their advisors to plan their programs.

b. *Statistics (21 hours):* COMP 4001, MATH 4635, 4636 [W], 4640, and one of MATH 4607 or 4637, and 6 additional upper division hours chosen from: MATH 3120, 4242, 4261, 4350 [W], 4351, 4361, 4391, 4551, 4721.

**D. Electives**

Electives may be chosen to bring the total number of hours to 124.

**E. Computer Literacy**

This requirement may be satisfied by courses in the major.

**F. Honors Program**

The Department of Mathematical Sciences offers an honors program in Mathematics and Statistics for the talented student. The student must satisfy the following course requirements with a minimum GPA of 3.50 in all MATH courses: The major with honors in Mathematical Sciences: 37 semester hours in MATH courses, including MATH 1421, 2421, 2422, 3402, 4402; plus the following courses applicable to the degree: CHEM 1110/1111, 1120/1121, or PHYS 2110/2111, 2120/2121; and completion of one of the two areas of concentration described above.

Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degrees conferred "With Honors in Mathematical Sciences." Moreover, the student's diploma and record at The University of Memphis will reflect this distinction.

**G. Second Major for Engineering Majors (30 hours)**

Twenty-four (24) semester hours in MATH courses including MATH 1910, 1920, 2110, 3120, 3242, and 6 semester hours in upper division MATH courses approved by the department, and 6 additional hours of mathematically related courses also approved by the department.

**H. Second Major for Chemistry Majors (30 hours)**

Twenty-four (24) semester hours in courses offered through the Department of Mathematical Sciences, including MATH 1910, 1920, 2110, and twelve (12) semester hours in upper division MATH courses approved by the department, and six (6) additional semester hours of mathematically related courses approved by the department.

**I. Second Major for Physics Majors**

Twenty-four (24) semester hours in courses offered through the Department of Mathematical Sciences, including MATH 1910, 1920, 2110, 3120, and nine (9) semester hours in upper division MATH courses approved by the department, and six (6) additional hours of mathematically related courses also approved by the department.

## Mathematical Sciences Minor

A minimum of 18 semester hours, including MATH 1910 (4), 1920 (4), 2110 (4) (or MATH 1421, 2421, 2422), plus 6 additional upper division semester hours in MATH courses approved by the department.

### Typical 4-Year Mathematical Sciences Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1910 | 4 | MATH 1920 | 4 |
| Social Science* | 3 | Nat. Sci./Math/B.S.** | 3-4 |
| PHED* | 2 | HMSE 1100 | 2 |
| Foreign Language/B.S. | 3 | Foreign Language/B.S. | 3 |
| Semester Totals | 15 hrs | | 15-16 hrs |

| | | | |
|---|---|---|---|
| **Sophomore Year** | | | |
| American Heritage* | 3 | American Heritage* | 3 |
| Literary Heritage* | 3 | MATH 2702 | 3 |
| MATH 2110 | 4 | COMM 2381 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Social Science* | 3 | Fine Arts Heritage* | 3 |
| Semester Totals | 17 hrs | | 16 hrs |
| **Junior Year** | | | |
| MATH 3242 [C] | 3 | MATH elective | 3 |
| Social Science/B.S. | 3 | MATH elective | 3 |
| MATH conc. elective | 3 | Hist/Phil Heritage* | 3 |
| Humanities/B.S. | 3 | Elective | 3 |
| Hist/Phil Heritage* | 3 | Upper division elective | 3 |
| | | Elective | 3 |
| Semester Totals | 15 hrs | | 18 hrs |
| **Senior Year*** | | | |
| MATH elective | 3 | MATH elective | 3 |
| MATH elective | 3 | MATH elective | 3 |
| Upper division elective | 3 | Elective | 3 |
| Elective | 3 | Upper division elective | 3 |
| Upper division elective | 3 | Upper division elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |

Total Hours: 126-127

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

** Choose: CHEM 1110/1111, 1120/1121 or PHYS 2110/2111, 2120/2121

# MICROBIOLOGY AND MOLECULAR CELL SCIENCES

## Department of Microbiology and Molecular Cell Sciences

Students must earn a minimum grade of "C" in all courses required for the major or applied to the minor. A total of 4 hours in research and practicum courses may be applied to the major or minor.

## Microbiology and Molecular Cell Sciences Major (B.S.)

### A. University General Education Program (48 hours)

See page 57 for the University General Education Program requirements. Note that BIOL/MMCS 1110/1111, BIOL 1120/1121, and MATH 1830 or 1910 are specified for the major.

### B. College and Degree (B.S.) Requirements (15-16 hours)

The College and Bachelor of Science requirements are in addition to the University General Education Program requirements and are listed on page 68.

### C. The Major (58-59 hours in addition to University General Education Program and B.S. degree requirements)

1. *Core requirements (38-39 hours):*
   Completion of CHEM 1110/1111, BIOL/MMCS 1110/1111, BIOL 1120/1121; MATH 1830 or 1910 (these courses are included in the University General Education Program and in the B.S. degree requirements), BIOL 3072 [I,C], MMCS 3500, 3600, 4503, 4511, 4512, CHEM 1120/1121, 3301/3311, 3302/3312, PHYS 2110/2111, 2120/2121, or PHYS 2010/2011, 2020/2021, and MATH 4611.
2. *Concentration requirements (20 hours):*
   a. *Biochemistry:* CHEM 3201/3211, 3401, 4604; MMCS 4504; MATH 1920; 4 additional upper division hours in MMCS or CHEM courses.
   b. *Microbiology:* MMCS 3550, 4300, 4445, 4460 or 4465, 4470; 5 additional upper division hours in MMCS courses.
   c. *Biotechnology:* MMCS 3130, 4150, 4200, 4470, 4504; 6 additional upper division hours in MMCS courses.

### D. Electives

Electives may be chosen to bring the total number of hours to 124.

### E. Computer Literacy

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

### F. Honors Program

MMCS majors who have attained junior status and who have a 3.25 grade point average overall and in biological science courses, may apply for admission to the Honors Program in Microbiology and Molecular Cell Sciences. Students admitted to this program must maintain a 3.25 cumulative grade point average and complete MMCS 4900, which requires a two-year research project culminating in an honors thesis. Students who successfully complete the honors program and regular college requirements will be recognized at commencement by having their degree conferred "With Honors in Microbiology and Molecular Cell Sciences." The student's diploma and record at The University of Memphis will also reflect this distinction. Details of the program are available in the MMCS office.

### G. Dual-Degree Programs

Highly motivated and talented students may pursue a bachelor's degree (B.S.) in MMCS followed by a master's degree (M.S.) in MMCS in a special five-year program. This option requires serious commitment, careful planning with the student's advisor, and summer research work leading to a Master's thesis. Students interested in pursuing this option should contact the undergraduate advisor in MMCS.

## Typical 4-Year Biochemistry Concentration

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| CHEM 1110/1111 | 4 | CHEM 1120/1121 | 4 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Foreign Language/B.S. | 3 | Foreign Language/B.S. | 3 |
| Social Science* | 3 | MATH 1830 or 1910 | 3-4 |
| PHED* | 2 | BIOL/MMCS 1110/1111 | 4 |
| Semester Totals | 15 hrs | | 17-18 hrs |
| **Sophomore Year** | | | |
| MMCS 3500 | 3 | BIOL 1120/1121 | 4 |
| MMCS 3600 | 2 | CHEM 3312/3302 | 4 |
| CHEM 3311/3301 | 4 | Literary Heritage* | 3 |
| MATH 1920 | 4 | American Heritage* | 3 |
| COMM 2381 | 3 | COMP 1200 | 4 |
| Semester Totals | 16 hrs | | 18 hrs |
| **Junior Year** | | | |
| BIOL 3072 [I,C] | 3 | MMCS 4512 | 3 |
| MMCS 4511 | 3 | MMCS 4504 | 2 |
| MMCS 4503 | 2 | Humanities/B.S. | 3 |
| PHYS selection** | 4 | PHYS selection** | 4 |
| American Heritage* | 3 | Fine Arts Heritage* | 3 |
| Semester Totals | 15 hrs | | 15 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| CHEM 3211/3201 | 4 | CHEM 3401 | 3 |
| MATH 4611 | 3 | CHEM 4604 | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| HMSE 1100 | 2 | MMCS conc. elective [W] | 4 |
| Social Science* | 3 | Social Science/B.S. | 3 |
| Semester Totals | 15 hrs | | 16 hrs |

Total Hours: 127- 128

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

**Choose: PHYS 2010/2011 and 2020/2021 or 2110/2111 and 2120/2121

## Typical 4-Year Microbiology Concentration Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| CHEM 1110/1111 | 4 | CHEM 1120/1121 | 4 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Foreign Language/B.S. | 3 | Foreign Language/B.S. | 3 |
| Social Science* | 3 | MATH 1830 or 1910 | 3-4 |
| Hist/Phil Heritage* | 3 | BIOL/MMCS 1110/1111 | 4 |
| Semester Totals | 16 hrs | | 17-18 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| MMCS 3500 | 3 | BIOL 1120/1120 | 4 |
| MMCS 3600 | 2 | MMCS 3550 | 3 |
| CHEM 3311/3301 | 4 | CHEM 3312/3302 | 4 |
| COMM 2381 | 3 | Literary Heritage* | 3 |
| COMP 1200 | 4 | American Heritage* | 3 |
| Semester Totals | 16 hrs | | 17 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| BIOL 3072 [I,C] | 3 | MMCS 4300 | 3 |
| MMCS 4511 | 3 | Fine Arts Heritage* | 3 |
| MMCS 4503 | 2 | MMCS 4512 | 3 |
| PHYS selection** | 4 | PHYS selection** | 4 |
| American Heritage* | 3 | HMSE 1100 | 2 |
| PHED* | 2 | | |
| Semester Totals | 17 hrs | | 15 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| MMCS 4445 | 3 | MMCS 4470 | 4 |
| MATH 4611 | 3 | MMCS conc. elective | 2-3 |
| MMCS 4460 or 4465 | 2 | Hist/Phil Heritage* | 3 |
| MMCS conc. elective [W] | 3 | Humanities/B.S. | 3 |
| Social Science* | 3 | Social Science/B.S. | 3 |
| Semester Totals | 14 hrs | | 15-16 hrs |

Total Hours: 127-129

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

**Choose: PHYS 2010/2011 and 2020/2021 or 2110/2111 and 2120/2121

## Typical 4-Year Biotechnology Concentration

**Freshman Year**

| | | | |
|---|---|---|---|
| CHEM 1110/1111 | 4 | CHEM 1120/1121 | 4 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Social Science* | 3 | BIOL/MMCS 1110/1111 | 4 |
| Foreign Language/B.S. | 3 | Foreign Language/B.S. | 3 |
| Fine Arts Heritage* | 3 | MATH 1830 or 1910 | 3-4 |
| Semester Totals | 16 hrs | | 17-18 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| MMCS 3500 | 3 | BIOL 1120/1121 | 4 |
| MMCS 3600 | 2 | MMCS 3130 | 3 |
| CHEM 3311/3301 | 4 | CHEM 3312/3302 | 4 |
| COMM 2381 | 3 | Literary Heritage* | 3 |
| COMP 1200 | 4 | American Heritage* | 3 |
| Semester Totals | 16 hrs | | 17 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| MMCS 4150 | 3 | BIOL 3072 [I,C] | 3 |
| MMCS 4511 | 3 | MMCS 4512 | 3 |
| MMCS 4503 | 2 | MMCS 4504 | 2 |
| PHYS selection** | 4 | PHYS selection** | 4 |
| American Heritage* | 3 | HMSE 1100 | 2 |
| PHED* | 2 | | |
| Semester Totals | 17 hrs | | 14 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| MATH 4611 | 3 | MMCS 4470 | 4 |
| MMCS conc. elective | 3 | MMCS 4200 | 2 |
| MMCS conc. elective [W] | 3 | Social Science/B.S. | 3 |
| Social Science* | 3 | Humanities/B.S. | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Semester Totals | 15 hrs | | 15 hrs |

Total Hours: 127-128

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

**Choose: PHYS 2010/2011 and 2020/2021 or 2110/2111 and 2120/2121

# PHILOSOPHY

## Department of Philosophy

## Philosophy Major (B.A.)

**A. University General Education Program (48- 51 hours)**

See page 57 for the University General Education Program requirements.

**B. College and Degree (B.A.) Requirements (18-19 hours)**

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed on page 67.

**C. The Major (30 hours)**

Completion of 30 semester hours in philosophy courses including PHIL 1101 or 1102, 1611, 3001, 3002, 3411or 3511[W] and 15 additional upper division semester hours.

**D. Electives**

Electives may be chosen to bring the total number of hours to 124.

### E. Computer Literacy

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

### F. Honors Program

This program is open to philosophy majors with a 3.0 overall grade point average and a 3.5 average in philosophy. The student will complete, with a grade of B or better, a thesis submitted for credit in PHIL 4891. The thesis topic must be approved by the thesis director before the student registers for PHIL 4891.

Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in Philosophy." Moreover, the student's diploma and record at The University of Memphis will reflect this distinction.

## Philosophy Minor

Completion of 18 semester hours in philosophy courses, including PHIL 1101 or 1102, 1611, and 12 upper division semester hours. In consultation with the coordinator of undergraduate studies in philosophy, a student may design a minor (18 hours) that applies to the student's major area of study.

## Typical 4-Year Philosophy Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL1020 | 3 |
| Fine Arts Heritage* | 3 | Fine Arts Heritage/B.A. | 3 |
| PHIL 1101 or 1102 | 3 | Hist/Phil Heritage* | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Semester Totals | 16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| Elective | 3 | Literary Heritage* | 3 |
| PHIL 1611 | 3 | Humanities/B.A. | 3 |
| PHIL 3001 | 3 | PHIL 3002 | 3 |
| Social Science* | 3 | Social Science* | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| | | PHED* | 2 |
| Semester Totals | 15 hrs | | 17 hrs |
| **Junior Year** | | | |
| Social Science/B.A. | 3 | Nat. Sci./Math/B.A. | 3-4 |
| MATH* | 3-4 | HMSE 1100 | 2 |
| COMM 2381 | 3 | Upper division elective | 3 |
| PHIL 3411 or 3511 [W] | 3 | Upper division PHIL | 3 |
| Upper division PHIL | 3 | COMP 1200 | 4 |
| PHIL 3621 [C] | 3 | | |
| Semester Totals | 18-19 hrs | | 15-16 hrs |
| **Senior Year** | | | |
| Elective | 3 | Integrative elective [I] | 3 |
| Upper division PHIL | 3 | Upper division PHIL | 3 |
| Upper division PHIL | 3 | Upper division elective | 3 |
| Upper division elective | 3 | Upper division elective | 3 |
| Elective | 3 | | |
| Semester Totals | 15 hrs | | 12 hrs |

Total Hours: 124-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

# PHYSICS

## Department of Physics

## Physics Major (B.S.)

### A. University General Education Program (49 hours)

See page 57 for the University General Education Program requirements. Note the following requirements specified for the Physics major: *Mathematics* - MATH 1910; *Natural Science* - CHEM 1110/1111, 1120/1121.

### B. College and Degree (B.S.) Requirements (18-19 hours)

The College and Bachelor of Science requirements are in addition to the University General Education Program requirements and are listed on page 68.

### C. The Major: (44 hours in addition to University General Education Program and B.S. degree requirements)

Completion of PHYS 2110/2111, 2120/2121 (PHYS 2010/2011, 2020/2021 are acceptable, but not recommended), PHYS 2515, 3010, 3011, 3111, 3211, 3610, 3611, 4410, 4510 [W], and six upper division hours of electives; CHEM 1110/1111, 1120/1121, MATH 1910 (these courses are included in the University General Education Program requirements); MATH 1920 (this course is included in the B.S. degree requirements), MATH 2110, 3120, or equivalent courses.

### D. Electives

Electives may be chosen to bring the total number of hours to 124.

### E. Computer Literacy

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

### F. Dual Degree Programs

Highly motivated and talented students may pursue an undergraduate degree (B.S.) in Physics followed by a graduate (M.S.) in either Physics or Biomedical Engineering in a special five-year program. This option requires serious commitment, careful planning with the student's advisor, and summer research work leading to a Master's thesis. Students interested in pursuing this option should contact an undergraduate advisor in the Physics department.

### G. Second Major for Engineering Students

A total of twenty-nine (29) semester hours beyond PHYS 2110/2111 and PHYS 2120/2121, many of which will count toward the engineering degree or are already required by the engineering major. Since Civil, Computer, and Mechanical engineering students take different courses to satisfy their degree requirements, the program for the second major in physics is different for each engineering discipline. For details, please contact the Department of Physics or the Physics web site at: *http:// www.people.memphis.edu/~physics/student.html*

## Physics Minor

Completion of 20 semester hours in physics courses, including PHYS 2110/2111, 2120/2121 (PHYS 2010/2011, 2020/2021 are acceptable but not recommended), PHYS 2515, and nine additional upper division hours.

## Typical 4-Year Physics Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| PHYS 2110/2111 | 4 | PHYS 2515 | 3 |
| MATH 1910 | 4 | MATH 1920 | 4 |
| Foreign Language/B.S. | 3 | Foreign Language/B.S. | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| HMSE 1100 | 2 | COMM 2381 | 3 |
| Semester Totals | 16 hrs | | 16 hrs |

| | | | |
|---|---|---|---|
| | **Sophomore Year** | | |
| PHYS 2120/2121 | 4 | PHYS 3011 | 3 |
| MATH 2110 [C] | 4 | MATH 3120 | 3 |
| Social Science* | 3 | Social Science* | 3 |
| CHEM 1110/1111 | 4 | CHEM 1120/1121 | 4 |
| | | Fine Arts Heritage* | 3 |
| Semester Totals | 15 hrs | | 16 hrs |
| | **Junior Year** | | |
| PHYS 3010 | 3 | PHYS 3111 | 3 |
| PHYS 3211 | 3 | COMP 1200 | 4 |
| PHYS 3610 | 1 | PHYS 3611 | 1 |
| American Heritage* | 3 | American Heritage* | 3 |
| Upper division elective | 3 | Hist/Phil Heritage* | 3 |
| Literary Heritage* | 3 | PHED* | 2 |
| Semester Totals | 16 hrs | | 16 hrs |
| | **Senior Year** | | |
| PHYS 4410 | 3 | PHYS 4510 [W] | 3 |
| Upper division PHYS | 3 | Upper division PHYS | 3 |
| Upper division elective | 3 | Humanities/B.S. | 3 |
| Hist/Phil Heritage* | 3 | Integrative [I] | 3 |
| Social Science/B.S. | 3 | | |
| Semester Totals | 15 hrs | | 12 hrs |

Total Hours: 125

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

# POLITICAL SCIENCE

## Department of Political Science

## Political Science Major (B.A.)

### A. University General Education Program (48 - 51 hours)

See page 57 for the University General Education Program requirements.

### B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed on page 67.

### C. The Major (36 hours)

Completion of POLS 1100, 1101, 1102, 1301, 1501, and a minimum of 21 additional upper division hours in the following areas: American Government, Pre-Law/Public Law, Political Theory, Urban Politics, and International Relations/Comparative Politics. Only nine (9) hours of internship and mock trial may be counted toward the 36 hours required for the major in Political Science.

NOTE: All majors are required to take one of the department's computational [C] courses to fulfill that requirement. Students who have taken a [C] course prior to declaring Political Science major are exempted.

NOTE: The department offers Pre-Law advising for those interested in careers in law. Also, any major in Political Science may earn a second major in International Studies. Political Science courses in International Relations and Comparative Politics fulfill requirements for both the Political Science major and the interdisciplinary major in International Studies.

### D. Electives

Electives may be chosen to bring the total number of hours to 124.

### E. Computer Literacy

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

### F. Honors Program

The department offers an honors program to qualified majors who choose to pursue a more sophisticated knowledge of the discipline, a more rigorous level of analysis, and a deeper understanding of politics. Students who have completed 55 hours of course work (with at least 9 hours in Political Science) and have a minimum over-all grade point average of 3.0 (with a minimum in Political Science of 3.25), or who can present equivalent qualifications, are invited to apply for admission to the program. The program requires 18 hours of honors course work, 12 or more of which must be upper-division Political Science courses, and minimum final grade point averages of 3.00 overall, 3.25 in Political Science, and 3.25 in honors coursework. Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degrees conferred "With Honors in Political Science." Moreover, the student's diploma and the record at The University of Memphis will reflect this distinction. Details of the program are available in the Political Science Office.

## Political Science Minor

Completion of 18 hours in Political Science courses, including POLS 1100, 1101 or 1102, or 1301 or 1501; and 12 additional semester hours, 9 of which must be in upper division courses. Only 6 semester hours of internship courses may be counted towards the 18 hour semester requirement.

## Typical 4-Year Political Science Sequence

| | | | |
|---|---|---|---|
| | **Freshman Year** | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| POLS 1100 | 3 | POLS 1501 | 3 |
| POLS 1101 | 3 | POLS 1102 | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Semester Totals | 16 hrs | | 16 hrs |
| | **Sophomore Year** | | |
| Fine Arts Heritage* | 3 | Fine Arts Heritage/B.A. | 3 |
| MATH* | 3-4 | Nat. Sci./Math/B.A. | 3-4 |
| Literary Heritage* | 3 | American Heritage* | 3 |
| POLS 1301 | 3 | Social Science/B.A. | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| American Heritage* | 3 | COMM 2381 | 3 |
| Semester Totals | 17-18 hrs | | 17-18 hrs |
| | **Junior Year** | | |
| Humanities/B.A. | 3 | Integrative [I] | 3 |
| COMP 1200 | 4 | Upper division POLS | 3 |
| Writing Intensive [W] | 3 | Upper division POLS | 3 |
| Upper division POLS | 3 | Elective | 3 |
| POLS 4101 [C] | 3 | Elective | 3 |
| Semester Totals | 16 hrs | | 15 hrs |
| | **Senior Year** | | |
| Elective | 3 | Upper division POLS | 3 |
| Upper division POLS | 3 | Upper division elective | 3 |
| Upper division POLS | 3 | Upper division elective | 3 |
| Upper division elective | 3 | Upper division elective | 3 |
| Upper division elective | 3 | | |
| Semester Totals | 15 hrs | | 12 hrs |

Totals Hours: 124-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

# PSYCHOLOGY

## Department of Psychology

## Psychology Major (B.A.)

### A. University General Education Program (48 - 51 hours)

See page 57 for the University General Education Program requirements. Note that PSYC 1200 is specified by the department as one of the *Social Science* courses.

### B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed on page 67.

### C. The Major (32 hours in addition to University General Education Program requirements)

1. Completion of PSYC 1200 (included in the University General Education Program requirements), PSYC 1300, 3001 (4) [C], 3002 (4) [W], 4101 [I]; at least one course each from the PSYC 3100, 3300, and 3500 series; and 9 additional hours. In addition, all majors must take the Psychology Field Test during their senior year.
2. *Concentrations (18 hours):*
   a. Behavioral Neuroscience: PSYC 3101, 3306, 3507, 4505, 4506, and 4997 (Thesis).
   b. General Psychology: Completion of at least one course each from the PSYC 3100, 3300, and 3500 series; and 9 additional hours in PSYC courses.

### D. Electives

Electives may be chosen to bring the total number of hours to 124.

### E. Computer Literacy

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

### F. Honors Program

The Honors Psychology Program requires twelve to eighteen hours of Honors work in the major. Students who complete the program with a 3.25 cumulative grade point average will earn degrees that include the distinction "With Honors in Psychology." However, all students who have a 3.25 cumulative grade point average can take advantage of a variety of educational opportunities through the Psychology Honors Program. These include enrolling in psychology honors classes (when offered); negotiating honors contracts for individually selected psychology classes; and, conducting an honors thesis in psychology. Student who do not meet the 3.25 cumulative GPA requirement can also obtain specific instructor permission to enroll in an honors class, negotiate an honors contract, or conduct an honors thesis.

*Psychology Honors Classes.* (1) PSYC 1101 and 1102 honors section of General Psychology. (Students who wish to enroll in these courses during their first year can do so either by meeting the requirements for the University Honors Program or by instructor permission); (2) PSYC 4032 honors section of Research Methodology; (3) PSYC 4305 Mind, Brain, and Intelligence, Honors; (4) PSYC 4016 Social Psychological Applications to Clinical Psychology, Honors; (5) PSYC 404X Honors Special Topics; (6) periodically offered honors sections of other courses in the psychology curriculum.

*Psychology Honors Contracts.* Student can ask the instructor of any psychology course to negotiate an honors contract, in which the instructor and student agree on additional honor-level requirements for the course.

*Psychology Honors Senior Thesis.* Students can ask a psychology faculty member to serve as advisor for PSYC 4996 (Honors Senior Thesis), Typically completed during the student's last semester. Before enrolling in PSYC 4996, it is recommended that the student complete at least one semester of PSYC 4504 (Directed Research) under the same faculty adviser who will oversee work in the honors thesis.

Please see the department honors coordinator for more detailed information about the Psychology Honors Program. Psychology majors may also be eligible to participate in the University Honors Program, described elsewhere in this Bulletin. Some psychology honors courses overlap with courses offered through the University Honors program.

## Typical 4-Year Psychology (B.A.) Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH* | 3-4 | MATH* (if needed) | 3 |
| PSYC 1200 | 3 | PSYC 1300 | 3 |
| American Heritage* | 3 | COMP 1200 | 4 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Semester Totals | 15-16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| PSYC 3001 [C] | 4 | PSYC 3002 [W] | 4 |
| Literary Heritage* | 3 | Elective | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| Natural Science* | 4 | Natural Science* | 4 |
| Elective | 3 | American Heritage* | 3 |
| Semester Totals | 16 hrs | | 16 hrs |
| **Junior Year** | | | |
| PSYC 31xx | 3 | PSYC 35xx | 3 |
| PSYC 33xx | 3 | Upper division PSYC | 3 |
| Fine Arts Heritage/B.A. | 3 | Upper division PSYC | 3 |
| Nat. Sci./Math/B.A. | 3-4 | Hist/Phil Heritage* | 3 |
| Upper division elective | 3 | COMM 2381 | 3 |
| Semester Totals | 15-16 hrs | | 15 hrs |
| **Senior Year** | | | |
| Upper division PSYC | 3 | PSYC 4101 [I] | 3 |
| Hist/Phil Heritage* | 3 | Upper division PSYC | 3 |
| Social Science/B.A. | 3 | Social Science* | 3 |
| Fine Arts Heritage* | 3 | Elective | 3 |
| Upper division elective | 3 | Humanities/B.A. | 3 |
| | | Upper division elective | 3 |
| Semester Totals | 15 hrs | | 18 hrs |

Total Hours: 126-128

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

## Psychology Minor

Completion of 20 semester hours in psychology, including PSYC 1200, 1300, 3001 (or equivalent), 3002, and 6 additional hours.

# PUBLIC and NONPROFIT ADMINISTRATION

## School of Urban Affairs and Public Policy

## Division of Public Administration

## Public Administration Minor

For a minor in Public Administration, the student must complete 18 hours in Political Science and Public Administration, including POLS 1100, PADM 3601, and PADM 4221. Additionally, the student should complete 9 hours from among the following: POLS 3211, POLS 3213, PADM 4101, POLS 4222, PADM 4226, PADM 4231or PADM 4710-19.

## Nonprofit Management Minor

The Division of Public and Nonprofit Administration offers an interdisciplinary minor in Nonprofit Management which includes courses that address competencies necessary for work in nonprofit organizations. The minor is open to students majoring in any department in the University or to special students who wish to enroll in order to take such a program.

Students who complete this minor and specified co-curricular activities will be eligible for certification in Nonprofit Management and Leadership by American Humanics, a certification program that builds competencies in nonprofit administration through coursework, internships, volunteer opportunities, student association leadership activities and professional development workshops.

**The Minor:** 24 semester hours of required courses and electives.

1. **Nonprofit Management and Program Planning (6 hours):** PADM/POLS 4226, ANTH 4412
2. **Accounting and Financial Management (3 hours):** ACCT 2010, ACCT 2020, or ACCT 3010
3. **Human Resource Development and Supervision (3 hours):** POLS 3601/ PADM 3601; MGMT 3110 or MGMT 3215
4. **Communication Skills (3 hours):** COMM 4342, COUN 4621, or MGMT 4420
5. **Marketing and Public Relations (3 hours):** JOUR 3400 or MKGT 3010
6. **Youth and Adult Development (3 hours):** PSYC 3103, PSYC 3104, EDPR 2111, CSED/EDPR 3302, LEAD 3350, SOCI 4541, SOCI 4923, or SWRK 3902
7. **Nonprofit Organizations (3 hours):** PADM 4231

# SOCIAL WORK

## School of Urban Affairs and Public Policy

## Division of Social Work

The main goal of the baccalaureate social work program is to prepare students for entry level generalist practice. A secondary goal is to provide a strong foundation for students who wish to pursue social work education at the graduate level. Social service and life experiences may not be substituted for any social work course. The social work program is accredited by the Council on Social Work Education.

## Social Work Major (B.A.)

### A. University General Education Program (48 - 51 hours)

See page 57 for the University General Education Program requirements. Students majoring in Social Work must take SOCI 3422 to fulfill part of the University General Education American Heritage requirement.

### B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed on page 67. Students majoring in Social Work must take PHIL 1611 to fulfill the B.A. Mathematics/Natural Science requirement prior to taking SOCI 3311 [C] and SWRK 3930.

### C. The Major (39 hours in addition to University General Education Program requirements)

Completion of SWRK 2910(4), 2911, 3902, 3903, 3904, 3906, 3920, 3930, 4830, 4831(4), 4840(2) [I], 4841(2) [I]. BIOL/MMCS 1010/1011, BIOL 1020/1021, ANTH 1200 (included in General Education Program requirements), and SOCI 3311 [C] are required.

NOTE: Successful student progression requires each student to earn a minimum grade of "C" in all required courses for the social work major. Students repeating two required classroom courses for the major or field instruction will have an academic review by division faculty in the term following the second course repetition. Although students may declare a social work major at any point in their matriculation, students should have a minimum of 40 hours completed including ENGL 1020, ANTH 1200, and two courses from the following list: SOCI 1111; PSYC 1200; POLS 1100; or ECON 2120 before entering the introductory social work courses, SWRK 2910 and SWRK 2911.

### D. Electives

Electives may be chosen to bring the total number of hours to 124.

### E. Computer Literacy

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

## Social Work Minor

Completion of 19 semester hours in sociology and social work courses including SOCI 1111, SWRK 2910(4) and 2911, and 9 additional upper division hours in social work courses.

## Typical 4-Year Social Work Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| BIOL/MMCS 1010/1011 | 4 | BIOL 1020/1021 | 4 |
| ANTH 1200 | 3 | MATH* | 3-4 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| SOCI 1111 | 3 | PSYC 1200 | 3 |
| Semester Totals | 16 hrs | | 16-17 hrs |
| **Sophomore Year** | | | |
| COMP 1200 | 4 | SWRK 2911 | 3 |
| Fine Arts Heritage* | 3 | Fine Arts Heritage/B.A. | 3 |
| PHIL 1611 | 3 | Literary Heritage* | 3 |
| PHED* | 2 | American Heritage* | 3 |
| SWRK 2910 | 4 | HMSE 1100 | 2 |
| | | SWRK 3902 | 3 |
| Semester Totals | 16 hrs | | 17 hrs |
| **Junior Year** | | | |
| SWRK 3903 | 3 | SWRK 3904 | 3 |
| SWRK 3920 | 3 | COMM 2381 | 3 |
| SOCI 3311 [C] | 3 | SWRK 3930 | 3 |
| Hist/Phil Heritage* | 3 | SWRK 3930 | 3 |
| SOCI 3422 | 3 | Humanities/B.A. | 3 |
| Semester Totals | 15 hrs | | 15 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| SWRK 4830 | 3 | SWRK 4841 [I] | 2 |
| SWRK 4840 [I] | 2 | Upper division elective | 3 |
| SWRK 3906 | 3 | SWRK 4831 | 4 |
| Elective [W] | 3 | Elective | 3 |
| Elective | 3 | Hist/Phil Heritage* | 3 |
| Semester Totals | 14 hrs | | 15 hrs |

Total Hours: 124-125

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

# SOCIOLOGY

## Department of Sociology

## Sociology Major (B.A.)

**A. University General Education Program (48 - 51 hours)**

See page 57 for the University General Education Program requirements.

**B. College and Degree (B.A.) Requirements (18-19 hours)**

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed on page 67.

**C. The Major (30 hours)**

Completion of 30 semester hours in sociology, including SOCI 1111, 3311 [C], 3322, 4210 or 4211.

**D. Electives**

Electives may be chosen to bring the total number of hours to 124.

**E. Computer Literacy**

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

**F. Honors Program**

The Honors Program in Sociology requires 18 hours of honors work, at least 12 hours of which must be upper-division sociology courses. To complete the Honors Program, a student must have a minimum overall final grade point average of 3.00 in Sociology, and a 3.25 grade point average in honors course work.

Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in Sociology." Moreover, the student's diploma and the record at The University of Memphis will reflect this distinction. Please see the department's Faculty Honors Advisor for more details on the program.

## Sociology Minor

Completion of 18 semester hours in sociology, including SOCI 1111.

## Typical 4-Year Sociology Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| SOCI 1111 | 3 | COMP 1200 | 4 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH* | 3-4 | MATH* (if needed) | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Semester Totals | 16-17 hrs | | 16 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| Literary Heritage* | 3 | SOCI 3311[C] | 3 |
| Nat. Sci./Math/B.A. | 3-4 | Fine Arts Heritage* | 3 |
| Literary Heritage* | 3 | Elective | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| Elective | 3 | PHED* | 2 |
| Elective | 3 | HMSE 1100 | 2 |
| Semester Totals | 15-16 hrs | | 16 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| SOCI 3322 | 3 | SOCI 4210 or 4211 | 3 |
| Upper division SOCI | 3 | Upper division SOCI | 3 |
| Hist/Phil Heritage* | 3 | Upper division SOCI | 3 |
| Writing Intensive [W] | 3 | Upper division elective | 3 |
| COMM 2381 | 3 | Fine Arts Heritage/B.A. | 3 |
| Semester Totals | 15 hrs | | 15 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| Upper division SOCI | 3 | Integrative [I] | 3 |
| Humanities/B.A. | 3 | Upper division SOCI | 3 |
| Upper division elective | 3 | Upper division SOCI | 3 |
| Social Science* | 3 | Hist/Phil Heritage* | 3 |
| Social Science* | 3 | Elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |

Total Hours: 124-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

# WOMEN'S STUDIES

## Interdisciplinary Studies Office

## Women's Studies Minor

This minor is designed to expose students to multidisciplinary approaches to racially diverse women's lives. Students therefore take courses from both the humanities and social sciences, and study issues of racial diversity as well as gender.

**A. The Minor**

18 semester hours, 9 hours from the core and 9 hours from the list of approved electives.

**B. Core (9 hours)**

HIST 4881 or SOCI 4460; PHIL 3452; WMST 2100.

**C. Electives (9 hours)**

Select one course from each of the following groups:

1. Women's Issues Across Time and Place: ANTH 3511, 4551; HIST 4831, 4851, 4853; SOCI 3432.
2. Cultural Studies: COMM 4373, 4856; ENGL 3325, 3326, 4372, 4373, 4451, SLS 4125.
3. Diversity Among Women: HIST 4882; PHIL 3741; POLS 4415, 4416; SOCI 3401, 3420, 3422, 4420.

With approval from the Director of Women's Studies, a special topics course may be substituted for an elective in each group.

# AEROSPACE STUDIES

The Department of Aerospace Studies provides a four-year program of instruction for all qualified U.S. citizens, male and female, divided into two phases, each of two years duration. The first, termed the General Military Course, offers instruction in the foundation of leadership and Aerospace-age citizenship. The second, termed the Professional Officer Course, builds upon these foundations in developing upperclassmen who are to become Air Force officers and serve on active duty upon graduation and commissioning. Students may apply for the two-year or four-year program, or they may enroll one year before applying for the two-year program.

Instruction in Aerospace Studies has been an important phase of the curriculum at The University of Memphis since 1951. Active duty Air Force personnel, approved by the University president, are detailed by the Department of the Air Force to administer the instructional program. Air Force officers serve under appointment by the University as Professor or Assistant Professor of Aerospace Studies.

## THE GENERAL MILITARY COURSE (GMC)

The two-year (4 semesters) General Military Course consists of one hour a week of classroom instruction and one and one-half hours a week in Leadership Laboratory. Textbooks are furnished by the Air Force without charge. Air Force uniforms are furnished and must be properly worn and kept in good condition. Cadets who successfully complete the GMC may apply for admission to the Professional Officer Course.

## THE PROFESSIONAL OFFICER COURSE (POC)

The Professional Officer Course provides instruction and systematic training to selected eligible students who desire to qualify as officers in the United States Air Force while pursuing their academic studies at the University. Successful completion of the requirements for the POC and for a baccalaureate degree leads to a commission in the United States Air Force as a Second Lieutenant. To be eligible for selection to the POC, a student must have at least two years remaining at the University (undergraduate, graduate, or a combination). Final selection is based on academic standing, leadership potential, percentile score on the Air Force Officer Qualifying Test, and physical qualifications. All eligible POC members receive an incentive payment of up to $1,700 per semester which is applied toward University tuition and textbook costs. In addition, members are furnished ROTC course textbooks without charge, receive a subsistence allowance of $350 to $400 per month and are issued uniforms provided by the Air Force.

## THE TWO-YEAR PROGRAM

All students who meet qualifying criteria may apply for selection to the Professional Officer Course under the Two-Year Program if they are not in the Four-Year Program. Processing of applications for the POC begins in the fall of each year. Application may be submitted through March 15. If selected, the student will attend a five-week field training program during the summer preceding entry into the POC. Graduates of the five-week field training are enrolled in the POC with the same status as cadets in the four-year program.

## LEADERSHIP LABORATORY

This lab is designed around a microcosm of the U.S. Air Force. It gives the cadets the opportunity to develop their leadership potential while allowing the staff to make evaluations based on actual managerial and leadership situations.

## AIR FORCE ROTC COLLEGE SCHOLARSHIP PROGRAM

Scholarships paying full tuition and fees, book allowance, and transportation to Memphis and a tax free subsistence allowance of $250 per month are available to entering freshmen and University students who are competitive academically and will enroll in the Air Force ROTC program. Details concerning qualifications and applications can be obtained from the Department of Aerospace Studies. NOTE: Several loan funds are also available to students enrolled in AFROTC. For more information, contact the department staff.

## FIELD TRAINING

Field Training is offered during the summer months at selected Air Force bases throughout the United States. Students in the four-year program participate in four weeks of Field Training (AERO 3211), usually between their sophomore and junior years. Students applying for entry into the two-year program must successfully complete five weeks of Field Training (AERO 3212) prior to enrollment in the Professional Officer Course.

## AEROSPACE STUDIES MINOR

Upon successful completion of 18 semester hours in Aerospace Studies with a minimum grade of "C", a cadet may apply for a minor in Aerospace Studies.

## SUPPLEMENTAL COURSES PROGRAM

The AFROTC Supplemental Courses Program (SCP) exists to enhance the career utility and officer performance of persons commissioned through AFROTC. The program consists of required and recommended college/university-taught courses. Cadets must successfully complete the required supplemental courses in addition to all Aerospace Studies courses.

*General Military Course (GMC):* Scholarship cadets must successfully complete a course in English composition. Additionally, they are encouraged to take a course in speech. Four-year scholarship cadets must satisfactorily complete the English composition course by the end of the GMC. GMC cadets receiving scholarships of less than four years duration will have two academic years to complete the English composition course. Failure to satisfactorily complete the required supplemental course in the specified period of time will result in termination of scholarship entitlements.

Non-scholarship four-year GMC cadets, two-year program applicants, and persons not required to complete the GMC need not take the GMC supplemental courses before POC entry. However, successful completion of GMC supplemental courses may enhance their chances for POC selection.

*Professional Officer Course:* cadets must successfully complete a course in mathematical reasoning before commissioning. Ideally, this course should include the acquisition of a specific skill, for example, statistics, computer science, or calculus.

# MILITARY SCIENCE

The Department of Military Science provides a four-year program of instruction designed to provide qualified college men and women with practical experience in the art of organizing, motivating and leading others. The program is divided into two courses each of two years duration. The first, called the Basic Course, offers instruction in leadership skills, soldiering skills, and the role and use of armed forces. The second, called the Advanced Course, builds on the Basic Course, offers practical leadership experience, and prepares the student for commissioning as an Army officer. Students may apply for the four year program, which can be completed in three years with department permission, or for the two-year program.

Department faculty and staff are active duty Army personnel detailed by Department of the Army and approved by the University president. The Army officers are appointed by the University as Professor or Assistant Professor of Military Science. Students interested in enrolling in any Military Science course should contact the Department of Military Science.

## THE BASIC COURSE

The Basic Course, two years in duration, consists of two semesters of one hour per week of classroom instruction and two semesters of two hours per week of classroom instruction. Courses are designed to be taken in the following order: ARMY 1100, 1110, 1115, 1120, 2100, 2105, 2115, 2120. All textbooks are furnished, without charge, by the department.

All offered courses count as elective credit toward the total university required hours for a degree. ARMY 2115/2120 meets the physical activity portion of the University General Education Program Fitness and Wellness requirement.

The Basic Course is designed for incoming freshmen. All other students are eligible to enter and may compress the Basic Course requirements into one year, with department permission. There is NO MILITARY OBLIGATION for enrolling in the Basic Course. Unless specified in the course description, students in the Basic Course are not required to wear uniforms or attend leadership laboratory.

Students who successfully complete the Basic Course may apply for entry into the Advanced Course.

## THE ADVANCED COURSE

The Advanced Course prepares qualified, selected male and female students for commissioning as Army officers while they continue to pursue academic degrees. Upon graduation, students may then serve in the Regular Army, Army Reserve, or Army National Guard in a variety of career fields.

To be eligible for the Advanced Course, the student must have completed the Basic Course or equivalent, (see 2-year program), be enrolled in the university fulltime, have at least two years remaining at the university (undergraduate or graduate), and be a U.S. citizen. Final selection is based on demonstrated academic performance, leadership potential, a qualifying score on the Officer Selection Battery of Tests, and physical qualifications.

The Advanced Course is two years in duration. During each of four semesters, the student attends three hours per week of classroom instruction and two hours per week of leadership laboratory. It is composed of ARMY 3100, 3111, 3115, 3121, 4100, 4110, 4111, 4115, and 4121, in sequence. All students receive a monthly subsistence allowance of $200.00, tax free, while enrolled in classes. All textbooks, uniforms, and equipment are furnished, without charge, by the department.

Students are given the opportunity to develop their leadership skills through the leadership laboratory, field training, and the Advanced Camp. The leadership laboratory is designed around a cadet structure that parallels a U.S. Army unit. Field training exercises are conducted over a weekend and are an extension of the laboratory. Students are also required to attend a six-week Advanced Camp during the summer between their two years in the Advanced Course. Advanced Camp is held at a U.S. Army post. Students are paid for the six weeks at the rate of one-half the pay of a Second Lieutenant and are furnished quarters and rations as well as transportation to and from the post.

All required courses count as elective credit toward the total university required hours for a degree. Completion of the Advanced Course meets the Fitness and Wellness University General Education Program requirement.

## THE TWO-YEAR PROGRAM

The Two-Year Program provides the opportunity to those students who did not enroll in the Four-Year Program to enroll in the Advanced Course. There are three methods for students to receive placement credit for the Basic Course and enter directly into the Advanced Course.

Students who meet qualifying criteria may receive credit for the Basic Course by attending the six-week Basic Camp at Fort Knox, Kentucky, during the summer. NO MILITARY OBLIGATION is incurred by the student by attending the Basic Camp. Students are paid for the six weeks at the rate of one-half the pay of a Second Lieutenant and are furnished quarters and rations as well as transportation to and from, or a mileage allowance for use of their own automobile. Successful completion of the Basic Camp will make the student eligible to enter the Advanced Course. Interested students should contact the Department of Military Science anytime during the academic year preceding the summer they desire to attend the camp.

Students who have completed Army Basic Combat Training and Advanced Individual Training or who have completed a minimum of three years of Army Junior ROTC in high school may be granted credit for the Basic Course by the Professor of Military Science and would then be eligible for entry into the Advanced Course, provided all other requirements are met. These students, as well as Basic Camp graduates, selected for enrollment in the Advanced Course are enrolled with the same status as cadets in the Four-Year Program.

## THE MINOR

A minor in Military Science can be obtained through meeting the following requirements: 19 semester hours consisting of ARMY 2105, 3100, 3111, 3115, 3121, 4100, 4111, 4115 and 4121.

## SCHOLARSHIP PROGRAM

Scholarships paying tuition, maintenance fee and other fees, a book allowance, and a tax-free subsistence allowance of $200 per month are available to university freshmen and sophomores who are competitive academically and who will enroll in the Army ROTC program. Applications are taken from December to February each academic year. Details concerning qualifications can be obtained from the Department of Military Science.

### SIMULTANEOUS MEMBERSHIP PROGRAM

The Simultaneous Membership Program is a voluntary program under which qualified cadets in the Advanced Course may concurrently join an Army National Guard unit. The program is designed to provide cadets with additional opportunities for leadership development and, at the same time, provide them with practical unit experience as Second Lieutenant. Cadets serve in an officer-trainee capacity and participate in regular unit drills held one weekend per month and two weeks per summer. Cadets are paid for all drills at the rate of a sergeant. This pay is in addition to the regular monthly subsistence for Army ROTC cadets. Details concerning qualifications and information on availability of allocations can be obtained from the Department of Military Science.

### PROFESSIONAL MILITARY EDUCATION

Professional Military Education is a component of the academic preparation for students desiring to pursue a commission as an Army officer. It consists of two essential parts, a baccalaureate degree and completion of university-taught, undergraduate courses from each of five designated fields of study. The fields of study are written communications, human behavior, military history, computer literacy, and math reasoning. Military Science students enrolled in the Advanced Course are also encouraged to take management and national security studies. Students may substitute approved alternative courses for any of these requirements. This is a requirement for students enrolled in the Advanced Course only, though applicable courses taken during enrollment in the Basic Course or before enrollment may still meet the requirement. Related required and elective courses taken for university degree requirements may also satisfy the requirement. Some of the Professional Military Education required courses may be waived by the Professor of Military Science if they would interfere with a student's required curriculum for award of a particular university degree.

### SPONSORED ACTIVITIES

The Department of Military Science sponsors the following voluntary extracurricular activities to provide students in both the Basic Course and Advanced Course with additional opportunities to develop leadership in conjunction with extending the student's knowledge of military skills:

1. The Army ROTC Tiger Color Guard—Members develop skill in standard drill and military ceremonies. The team provides color guards at The University of Memphis athletic events and drills competitively against ROTC teams of other colleges and universities. The team is open to individuals enrolled in any Military Science course.
2. U of M Ranger Company—Members develop skills associated with patrolling, mountaineering, survival training, and other similar activities. The Ranger Company is an adventure-type unit under the direction of Army ROTC Advanced Course cadets. Membership is open to all interested full-time students.

# NAVAL SCIENCE

The Department of Naval Science provides a four-year program of instruction leading to a commission as an officer in the U.S. Navy or Marine Corps. The program is known as the Naval Reserve Officer Training Corps (NROTC) and is voluntary in that students may withdraw from the program at any time during the freshman year. At the start of the sophomore year, scholarship NROTC students enter into an agreement with the Department of the Navy that specifies active duty service after college work is completed.

### REQUIREMENTS

The general requirements for enrollment in the NROTC College Program are to:

1. be a citizen of the United States
2. be physically qualified
3. possess personal characteristics and potential requisite to be a Naval/Marine Corps Officer
4. not be a conscientious objector
5. meet other requirements as specified by the U.S. Navy.

### THE FOUR-YEAR PROGRAM

The four-year program is geared to students who enter the NROTC program as freshmen. Students are introduced to the field of naval science, which encompasses a broad variety of subjects ranging from basic seamanship to fleet operations. Topics covered during the first half of the four-year program include principles of naval ships systems, naval leadership and management, seapower, and maritime affairs. The second half of the four year program (junior and senior years) is devoted to navigation and naval operations, naval weaponry, naval leadership and ethics, and, for Marine Corps Option Students, Amphibious Warfare and a study of warfare through the ages. In addition to specified courses, students will also meet with their NROTC unit weekly for orientation experiences to service life. Four-week summer training cruises are also part of the naval science program.

### THE TWO-YEAR PROGRAM

The two-year program is for interested students who are eligible and qualify to participate in NROTC in their junior and senior years. Students should apply for enrollment through the Professor of Naval Science before the spring semester of the sophomore year. If accepted into the two-year program, students will attend the six-week Naval Science Institute at Newport, Rhode Island, during the summer between the sophomore and junior years. Upon return to campus, students will participate in the NROTC program.

### NAVAL SCIENCES MINOR

Completion of 18 semester hours in the following: NAVY 1101, 1105, 2401, 4402 (9 hours total); and select three courses from the following electives: NAVY 2205, 3301, 3302, 3310, 4207, 4410.

## FINANCIAL BENEFITS AND NROTC SCHOLARSHIPS

All NROTC students receive required uniforms and naval science textbooks when they begin the program as freshmen. In their junior year as two-year program students, they will also receive a tax-free subsistence allowance of $200 a month. NROTC scholarship students will also receive tuition, cost of textbooks, instructional fees and $200 a month. Students receive pay and are reimbursed for associated travel expense while participating in summer training experiences. Students interested in the Naval ROTC programs should contact the Professor of Naval Science.

# The Fogelman College of Business and Economics

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COY A. JONES, Ph.D.
Interim Associate Dean for Academic Programs
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| Departments/School | Major | Concentrations Within Major | Degree Offered |
|---|---|---|---|
| School of Accountancy | *Accounting | | Bachelor of Business Administration (B.B.A.) |
| Economics | *Business Economics | | Bachelor of Business Administration (B.B.A.) |
| Finance | *Finance<br>*Real Estate<br>*Risk Management and Insurance | | Bachelor of Business Administration (B.B.A.)<br>Bachelor of Business Administration (B.B.A.) |
| Interdisciplinary Program | *International Business | | Bachelor of Business Administration (B.B.A.) |
| Management | Hospitality and Resort Management<br>*Management | | Bachelor of Business Administration (B.B.A.) |
| Management Information Systems | *Management Information Systems | | Bachelor of Business Administration (B.B.A.) |
| Marketing & Supply Chain Management | *Logistics/Supply Chain Management<br>*Marketing Management<br>*Sales | | Bachelor of Business Administration (B.B.A.) |

* Minor available. Minor also available in Pre-Professional Business Administration (See International Business Major).

Individual program requirements described in *The University of Memphis 2003-2004 Undergraduate Bulletin* are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this *Bulletin*; or consult the undergraduate *Bulletin* website at: *http://www.people.memphis.edu/~acadafflib/bulletin/bulletin.htmlx* for the latest updates.

## PURPOSE

The function of The Fogelman College of Business and Economics is to provide the basic education at the undergraduate level necessary to prepare a person to enter the profession of business. A significant characteristic of the college is that it provides for concentration in the basic areas of economics and business, not as a substitute for, but as a part of, a broad liberal education. From fifty to sixty percent of the course work taken for the Bachelor of Business Administration degree (a required minimum of 50 percent) is taken in such areas as the humanities, the natural and physical sciences, and the social sciences.

The undergraduate and graduate programs of the college are fully accredited by the American Assembly of Collegiate Schools of Business.

## MISSION AND OBJECTIVES OF THE UNDERGRADUATE PROGRAM FOGELMAN COLLEGE OF BUSINESS AND ECONOMICS

The Fogelman College of Business and Economics strives to provide a learning environment that fosters scholarship, intellectual curiosity, and collegiality. The mission of the undergraduate degree program is to prepare students for meaningful and responsible participation in a broad range of career opportunities in business, government, and institutional settings, or for advanced professional or graduate education. The College is dedicated to helping students acquire the competencies and attitudes for a lifetime of learning as they face the challenges of the future.

The objectives of the undergraduate curriculum at the Fogelman College of Business and Economics are to help students acquire the following knowledge and skills:

### KNOWLEDGE

Knowledge of cultural, global, and ethical environment within which businesses operate; an appreciation of the impact of business decisions on society, the enterprise, and individuals; knowledge of mathematics and quantitative methods necessary to effectively analyze business decisions; an understanding of the role and impact of diversity in organizations; and understanding of the management of information and information technology; foundation knowledge in each of the functional areas of business and in-depth understanding of one or more specializations; an awareness of the relationship between academic theory and practice to promote informed decisions under conditions of uncertainty.

### SKILLS

Ability to integrate knowledge from various disciplines to define business problems and research solutions; critical thinking and decision-making skills essential to solving business problems; communication skills to effectively participate in the business environment and larger society; proficiency in relevant computer applications; ability to contribute within a team environment to enhance organizational effectiveness; ability to analyze ethical situations within the context of the global business environment.

## Honors Program

### ADMISSION

*Lower Division:* Incoming freshmen whose minimum score is 26 on the ACT or its equivalent on other tests are invited to participate and are eligible to enroll in the designated honors sections of this college's lower division courses.

*Transfer or students presently enrolled in* The University of Memphis are eligible to enroll in the designated honors sections of this college's lower division courses if they have a minimum 3.00 grade point average or the recommendation of a faculty member.

*Upper Division:* To be eligible to enroll in the designated honors sections of this college's upper division courses, students must have a minimum 3.25 grade point average in course work taken in the Fogelman College of Business and Economics and a 3.00 overall grade point average.

### RETENTION

The participating honors student must maintain a minimum 3.00 grade point average in lower division and upper division honors courses, have a minimum 3.25 grade point average in all courses taken in the Fogelman College of Business and Economics, and a minimum overall grade point average of 3.00 to continue in the college's Honors Program.

### REQUIREMENTS

To qualify for "Honors in Business," in addition to an Honors Thesis, a student must successfully a minimum of 18 semester hours from the following:

1. Maximum of 6 hours from Honors Sections in: ACCT 2010, 2020; ECON 3310, 3320; ISDS 2710, 3711[C], 2755; or ECON 2110, 2120.
2. At least 12 hours from Honors Sections in: ECON 4112; FIR 3130, 3410; ISDS 3510; MGMT 3110, MGMT 4710 [I]; MKTG 3010; MGMT 3510 [W].

In some circumstances, additional contract work and enrollment in a non-honors section of a required upper division course may be accepted as upper division honors credit. A maximum of 6 hours of upper division honors credit may be contracted.

A minimum grade of "B" (3.0) is required in each honors course for it to count toward fulfilling the honors course requirement, but regular credit for the course will be earned if the grade is lower than a "B" (3.0).

### THESIS

During their senior year, prospective honors graduates must successfully complete an honors thesis, which, in addition to the 18 hours of honors course work, will qualify them to graduate "With Honors in Business." Students will select a major advisor and submit a thesis proposal. This proposal must be approved by the advisor and the Director of the College Honors Program. Upon completing the thesis, the student must submit it for approval to the advisor and the College Director.

### CERTIFICATE OF ACHIEVEMENT

Students who complete a minimum of 12 hours in Honors course work with a minimum of 3.25 grade point average and a minimum of "B" (3.0) in each of the Honors courses will receive a Certificate of Achievement.

### DESIGNATION OF "WITH HONORS IN BUSINESS"

Students who complete 18 hours (meeting the restrictions listed) with an acceptable Honors Thesis and a minimum 3.25 grade point average in all courses taken in The Fogelman College of Business and Economics, and in all Honors courses taken in this college, with a minimum overall grade point average of 3.00 will have earned the designation of "With Honors in Business" which will appear on the transcript and diploma.

# ORGANIZATION OF THE COLLEGE

The Fogelman College of Business and Economics comprises six academic units: School of Accountancy; Department of Economics; Department of Finance; Department of Management; Department of Marketing and Supply Chain Management; Department of Management Information Systems. These academic units offer a variety of majors and minors, the detailed requirements for which are listed later in this section. The interdisciplinary International Business Program centered in this college offers an undergraduate major in International Business; requirements are listed in the section pertaining to academic department requirements. In addition there are two research units: Sparks Bureau of Business and Economic Research and Center for Manpower Studies.

## Academic Advising

Every student entering The Fogelman College of Business and Economics will receive advice in the college's Advising Office. The advisor will assist the student in the selection of appropriate courses and provide the opportunity for meaningful discussion regarding career goals, past academic experience and future academic growth and progress as it relates to the student's development. This assistance, however, does not in any way relieve the student of the primary responsibility of studying the *Undergraduate Bulletin* and fulfilling all the requirements for the degree.

## Intent to Graduate

Intent to graduate forms are filed with the Graduation Analyst in The Fogelman College of Business and Economics. Students must schedule an appointment before the established application deadline published in the online class schedule. Deadlines are strictly enforced. At this time, an audit of the prospective graduate's academic record is conducted, and the applicant will be provided with an official graduation agreement indicating the remaining degree requirements.

## RESIDENCE REQUIREMENTS

Residence requirements for a degree in business administration are as follows: (1) the senior year must be completed at The University of Memphis, (2) a minimum of 33 hours of upper division business courses must be taken at The University of Memphis, and (3) 12 of the 33 upper division business administration hours must be in the major field.

A student transferring credits from a two-year (lower division) college must complete a minimum of 60 semester hours in an accredited senior institution.

Students with transfer credit are required to maintain a 2.0 GPA on all courses taken at The University of Memphis.

**MINOR.** To earn a minor in this college, a transfer student majoring in one of the other colleges of the university or in this college must earn at The University of Memphis a minimum of 6 upper division business administration hours of the total number of hours required for that minor.

See University Residence Requirements in the Graduation from the University section.

## TRANSFER CREDIT

The official evaluation and acceptance of transfer credit is the responsibility of the Office of Admissions. The Undergraduate Advising Office of The Fogelman College of Business and Economics, however, will answer inquiries regarding the applicability of transfer course work for the completion of the B.B.A. degree.

If a student transfers credit in required business courses that are classified as upper division in this college, but were taken as lower division credit or taken at a two-year (lower division) institution, these courses must be repeated or validated by examination. Validated courses are not considered U of M credit and will not count toward hours of residency.

## B.B.A. DEGREE REQUIREMENTS

1. To qualify for the Bachelor of Business Administration (B.B.A.) degree, the student must complete a minimum of 124 semester hours with a minimum overall grade point average of 2.00 and meet additional grade point average requirements described below.
2. Minimum grade of "C" (2.0) and a minimum grade point average of 2.25 (ACCT majors-2.5) is necessary in these lower division courses: MATH 1830, ISDS 2710, ECON 2110, 2120, ACCT 2010, 2020, ISDS 2749, 2755. A minimum grade of "C" (2.0) and a minimum grade point average of a 2.25 is necessary for these upper division courses: ECON 4112, FIR 3130, 3410, MGMT 3110, 3510 [W], 4710 [I], ISDS 3510, 3711[C], MKTG 3010, and the International Business course.
3. A minimum of 50% (62 hours) of the 124 hours required for the degree must be B.B.A. general education hours. Note: Included in this requirement are: ECON 2110, 2120, 4112, ISDS 2710, and 3711[C].
4. B.B.A. students may apply no more than two semester hours of physical activity courses to the minimum degree requirements of 124 semester hours.
5. All courses used to satisfy specific degree requirements of this college must be taken on a "letter grade" OR "credit by examination" basis. Hours earned on a "credit/no credit" basis are accepted only in courses designated as electives in the student's degree program. Courses taken on an "audit" basis cannot be used to satisfy college requirements.
6. The computer literacy requirement will be met by successfully passing ISDS 2749 (Introduction to Business Microcomputer Applications), ISDS 2755 (Introduction to Management Information Systems), and other required Business Administration core courses.
7. In the B.B.A. degree, the following courses are used to meet University General Education Program computation and writing intensive and integrative requirements. Credit by exam is not available for these courses:

   **Computation Intensive:** ISDS 3711.

   **Writing Intensive:** MGMT 3510.

   **Integrative:** MGMT 4710.
8. A surcharge of $10 per credit hour for 3000 and 4000 level courses and $20 per credit hour for 6000-9000 level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).

## General Requirements

The college curriculum is organized into a lower division and an upper division:

THE LOWER DIVISION (LD) comprises the freshman and sophomore years, the first four semesters of university work. Courses offered in the lower division are numbered from 1000 through 2999, and the student must register consistently for all lower division requirements until they are completed.

**ADMISSION TO DEGREE PROGRAM:**

To continue into the upper division business courses, all students seeking a degree in the Fogelman College of Business and Economics must (1) complete the following courses with a minimum grade of "C" (2.0) and a minimum 2.25 G.P.A. (2.5 G.P.A. for Accounting majors): MATH 1830, ECON 2110, 2120, ISDS 2710, ACCT 2010, 2020, ISDS 2749, 2755; (2) have accumulated 55 hours of course work including the required 9 hours of English; MATH 1830; ECON 2110, 2120; ACCT 2010, 2020; and ISDS 2710, 2749, 2755.

THE UPPER DIVISION (UD) comprises all junior and senior years of undergraduate work; courses offered in the upper division are numbered 3000 through 4999. **Students must have junior standing and have met specific course prerequisites with a minimum grade of "C" (2.0) to be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of "C" (2.0) in each; (2) minimum of 2.25 GPA (2.5 for ACCT majors) in all required lower division business courses and MATH 1830, and (3) 55 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements).**

**RETENTION:**

To graduate from the Fogelman College of Business and Economics, all students must have a minimum grade point average of a "C" (2.0) and a 2.25 G.P.A. in the following courses: ECON 4112, FIR 3130, 3410, MGMT 3110, 3510 [W], 4710[I], MKTG 3010, ISDS 3510[W], 3711[C] and the International Business course. All major courses require a minimum grade of "C" (2.0).

## Enrollment Priority

Neither admission by The University of Memphis and The Fogelman College of Business and Economics nor completion of the minimum requirements guarantees admission to any specific course offered by the college. Limited resources may require that enrollment in business classes be based on ranking by Grade Point Average with exceptions being made for graduating seniors.

### I. THE MAJOR

Each student, with the assistance of an advisor in the college, not later than the beginning of the junior year, will select a major and, if available, an area of concentration within the major. The specific courses required by each department for the satisfaction of its major are listed in the section following. A major requires a minimum of 21 hours beyond upper division core requirements, and courses used to satisfy one major may not be used toward a second major. A minimum grade of "C" (2.0) must be earned for each required course for the major.

### II. COURSES NOT APPLICABLE TOWARD B.B.A. DEGREE

Transitional Academic Studies (DSP_) courses may not be used to fulfill the minimum number of hours required for the B.B.A. degree.

### III. THE MINOR

A student whose major is within The Fogelman College of Business and Economics is not required to have a minor; however, such an option is available. A minimum grade of "C" (2.0) must be earned for each required course in the lower division and upper division business administration core curriculum and in each course required for the minor.

A student whose major is within one of the other colleges of the University may take a minor in one of the academic departments. (See Residence Requirements for The Fogelman College of Business and Economics.)

## ACADEMIC REQUIREMENTS FOR MAJORS AND MINORS

# ACCOUNTING

## School of Accountancy

The mission of the bachelor's degree program in Accountancy is to serve the needs of students, the accounting profession, and the general business community through teaching, research and service. Within this mission, the department offers students a balanced integrative approach to business education. In this interdisciplinary view, students must have a broad University General Education Program grounded in non-business courses, a strong supporting business acumen, and an interrelated view of accounting to the other areas of business. Specifically, accounting classes synthesize accounting with the financing, investing, and operating functions so that students can develop their critical thinking skills and apply them to making decisions on accounting and other business problems. Overall, the B.B.A. with a major in Accounting is built on the foundation of technical, interpersonal, and communication skills. This focus allows enhancement of careers and leadership to businesses and government units that would strengthen the economic development of communities, state, and nation.

## Accounting (B.B.A.)

### A. University General Education Program (48 hours)

See page 57 for the University General Education Program requirements. Note that MATH 1830 (*Mathematics* requirement) and ECON 2110 and 2120 (*Social Science* requirement) are specified for the B.B.A. degree.

### B. College and Degree (B.B.A.) Requirements (45 hours)

*Lower Division Business Core Curriculum (15 hours)*

ACCT 2010 Fundamentals of Accounting I (3)

ACCT 2020 Fundamentals of Accounting II (3)

ISDS 2710 Business Statistics (3)

ISDS 2749 Introduction to Business Microcomputer Applications (3)

ISDS 2755 Introduction to Management Information Systems (3)

*Upper Division Business Core Curriculum (30 hours)*

Minimum grade of "C" (2.0) and 2.25 GPA in the following courses:

FIR 3130 Legal, Social, and Political Environment of Business (3)

FIR 3410 Business Finance (3)

MGMT 3110 Organization and Management (3)

MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)

MKTG 3010 Principles of Marketing (3)

MGMT 3510 Business Communications (3) [W]

ISDS 3510 Production and Operations Management (3)

ISDS 3711 Analytical Tools for Business Decisions (3) [C]

ECON 4112 Organizational Economics (3)

Choose One:

MGMT 4810, International Management (3); MKTG 4530, International Marketing (3); ECON 4350, International Economics (3); FIR 4550, International Finance (3); MGMT 4510, International Business Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce (3); HPRM 4400 International Hospitality (3); ISDS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair.

Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

### C. The Major (24 hours)

24 upper division semester hours in Accounting courses as follows: ACCT 3110, 3120, 3310, 3510, 4020, 4240, and 6 hours of accounting electives.

### D. Electives (7 hours)

Lower division or upper division courses to bring the total of non-business hours earned to 62. *Note: Economics courses other than the required courses of ECON 2110, 2120, and 4112 will not count as non-business course work.*

### E. Computer Literacy

This requirement is met by successfully passing ISDS 2749, ISDS 2755, and other required courses.

## Accounting Minor

*For students whose major is in another college of the University (15 hours):* ACCT 2010, 2020, 3110, 3310; plus one of the following: ACCT 3120, 3510.

*For students whose major is in a department in The Fogelman College of Business and Economics (12 hours):* ACCT 3110, 3120, 3310, 3510.

## Typical 4-Year Accounting Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Elective** | 2-3 | ISDS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | 15-16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| Literary Heritage* | 3 | ISDS 2755 | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 17 hrs | | 17 hrs |
| **Junior Year** | | | |
| ACCT 3110 | 3 | ACCT 3120 | 3 |
| FIR 3130 | 3 | ACCT 3310 | 3 |
| ISDS 3711[C] | 3 | FIR 3410 | 3 |
| MGMT 3110 | 3 | MGMT 3510 [W] | 3 |
| MKTG 3010 | 3 | Elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| **Senior Year** | | | |
| ACCT 3510 | 3 | ACCT 4240 | 3 |
| ACCT 4020 | 3 | ACCT elective | 3 |
| ECON 4112 | 3 | Intl Business elective | 3 |
| ISDS 3510 | 3 | MGMT 4710 [I] | 3 |
| Fine Arts Heritage* | 3 | ACCT elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |

Total Hours: 124-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

**MGMT 1010 recommended

# BUSINESS ECONOMICS

## Department of Economics

The Business Economics program has two major objectives. The first objective is to provide majors and minors with a solid foundation and the analytical and critical thinking skills needed to make effective decisions. The second objective is to promote and develop economic literacy in other student populations in the Fogelman College of Business and Economics at The University of Memphis and the local and regional community. Economic literacy and the application of economic thinking to the everyday world realizes the program's goal of providing these populations with the tools to make more effective personal and public choices.

## Business Economics Major (B.B.A.)

### A. University General Education Program (48 hours)

See page 57 for the University General Education Program requirements. Note that MATH 1830 (*Mathematics* requirement) and ECON 2110 and 2120 (*Social Science* requirement) are specified for the B.B.A. degree.

### B. College and Degree (B.B.A.) Requirements (45 hours)

*Lower Division Business Core Curriculum (15 hours)*

ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
ISDS 2749 Introduction to Business Microcomputer Applications (3)
ISDS 2755 Introduction to Management Information Systems (3)

*Upper Division Business Core Curriculum (30 hours)*

Minimum grade of "C" (2.0) and 2.25 GPA in the following courses:
FIR 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
ECON 4112 Organizational Economics (3)

Choose One:

MGMT 4810, International Management (3); MKTG 4530, International Marketing (3); ECON 4350, International Economics (3); FIR 4550, International Finance (3); MGMT 4510, International Business Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce (3); HPRM 4400 International Hospitality (3); ISDS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair.

Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

### C. The Major (21 hours)

A minimum of 21 upper division semester hours in courses as follows:

ECON 3310, 3320, and 15 additional upper division hours selected with the approval of the department advisor.

The Major (B.A., College of Arts and Sciences). The student is required to meet the requirements for the Bachelor of Arts degree plus these specific major requirements: ECON 2110, 2120, 3310, 3320, and six additional upper division courses, for a total of 30 semester hours, selected with the approval of the department advisor.

### D. Electives (13 hours)

Lower division or upper division courses to bring the total of non-business hours earned to 62. Note: Economics courses other than the required courses of ECON 2110, 2120, and 4112 will not count as non-business course work.

### E. Computer Literacy

This requirement is met by successfully passing ISDS 2749, ISDS 2755, and other required courses.

### F. Honors Program

All students who receive a minimum grade of "B" (3.0) in ECON 2110 or 2120 honors sections are eligible for the program. Entry to the program can also be obtained through the recommendation of a member of the faculty to the Department of Economics Honors Committee. A student must maintain a grade point average of at least 3.25 in economics to continue in the program and must have a minimum grade point average of 3.5 in economics to graduate "With Honors in Economics." Honor students take special courses during the junior and senior years, particularly the honors sections of ECON 3310 and 3320, and write a senior research paper. At commencement they are awarded the special distinction "With Honors in Economics." Details of the program are available at the department office.

## Business Economics Minor

*For students whose major is in another college of the University:* 18 semester hours in economics courses, including ECON 2110, 2120, and 12 additional upper division hours in courses as approved by the department advisor.

*For students whose major is in another department in The Fogelman College of Business and Economics:* 9 additional upper division hours in economics approved by the department advisor.

## Typical 4-Year Business Economics Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Elective** | 2-3 | ISDS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | 15-16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| Literary Heritage* | 3 | ISDS 2755 | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 17 hrs | | 17 hrs |
| **Junior Year** | | | |
| ECON 3310 | 3 | ECON 3320 | 3 |
| FIR 3130 | 3 | ECON elective | 3 |
| ISDS 3711[C] | 3 | ECON 3410 | 3 |
| MGMT 3110 | 3 | MGMT 3510 [W] | 3 |
| MKTG 3010 | 3 | Elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| **Senior Year** | | | |
| ECON elective | 3 | ECON elective | 3 |
| ECON elective | 3 | ECON elective | 3 |
| ECON 4112 | 3 | Intl Business elective | 3 |
| ISDS 3510 | 3 | MGMT 4710 [I] | 3 |
| Fine Arts Heritage* | 3 | Elective | 2-3 |
| Semester Totals | 15 hrs | | 14-15 hrs |

Total Hours: 124-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

**MGMT 1010 recommended

# FINANCE

## Department of Finance

The primary objective of the Finance program is to provide the basic concepts, principles and analytical tools essential for business decisions in the fields of finance. The curriculum is designed to provide a broad background for effective functioning within the discipline.

Finance majors study the environment, theory and techniques of decisions on the acquisition of funds by business firms, including the applied areas of investment and financial institutions.

## Finance Major (B.B.A.)

### A. University General Education Program (48 hours)

See page 57 for the University General Education Program requirements. Note that MATH 1830 (*Mathematics* requirement) and ECON 2110 and 2120 (*Social Science* requirement) are specified for the B.B.A. degree.

### B. College and Degree (B.B. A.) Requirements (45 hours)

*Lower Division Business Core Curriculum (15 hours)*

ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
ISDS 2749 Introduction to Business Microcomputer Applications (3)
ISDS 2755 Introduction to Management Information Systems (3)

*Upper Division Business Core Curriculum (30 hours)*

Minimum grade of "C" (2.0) and 2.25 GPA in the following courses:
FIR 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
ECON 4112 Organizational Economics (3)

Choose One:

MGMT 4810, International Management (3); MKTG 4530, International Marketing (3); ECON 4350, International Economics (3); FIR 4550, International Finance (3); MGMT 4510, International Business Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce (3); HPRM 4400 International Hospitality (3); ISDS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair.

Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

### C. The Major (21 hours)

A minimum of 21 upper division semester hours in courses as follows: FIR 3710, 3720, 4440, 4610, and nine additional upper division hours in courses selected with the approval of the advisor.

### D. Electives (13 hours)

Lower division or upper division courses to bring the total of non-business hours earned to 62. Note: Economics courses other than the required courses of ECON 2110, 2120, and 4112 will not count as non-business course work.

### E. Computer Literacy

This requirement is met by successfully passing ISDS 2749, ISDS 2755, and other required courses.

## Finance Minor

*For students whose major is in another department in The Fogelman College of Business and Economics:* 9 upper division hours in finance approved by department chair.

*For students whose major is within another college of the University: (24 hours)* ACCT 2010 and 2020; ECON 2110, 2120, 3610; FIR 3410, 3710. Three additional upper division hours approved by the department chair.

## Typical 4-Year Finance Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Elective** | 2-3 | ISDS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | 15-16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| Literary Heritage* | 3 | ISDS 2755 | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 17 hrs | | 17 hrs |

| | | | |
|---|---|---|---|
| | **Junior Year** | | |
| FIR 3410 | 3 | FIR 3710 | 3 |
| FIR 3130 | 3 | ISDS 3510 | 3 |
| ISDS 3711[C] | 3 | FIR 3720 | 3 |
| MGMT 3110 | 3 | MGMT 3510 [W] | 3 |
| MKTG 3010 | 3 | Elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| | **Senior Year** | | |
| FIR elective | 3 | FIR 4610 | 3 |
| FIR 4440 | 3 | FIR elective | 3 |
| ECON 4112 | 3 | MGMT 4710 [I] | 3 |
| FIR elective | 3 | Intl Business elective | 3 |
| Fine Arts Heritage* | 3 | Elective | 2-3 |
| Semester Totals | 15 hrs | | 14-15 hrs |

Total Hours: 124-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

**MGMT 1010 recommended

# HOSPITALITY AND RESORT MANAGEMENT

## Department of Management

The primary goal of the Hospitality and Resort Management (HPRM) program is to produce graduates who have the knowledge and skills necessary for them to be successful in the increasingly competitive hospitality business environment. HPRM is committed to expanding the general business knowledge, specific hospitality skills, and overall technical competence of both students who matriculate and faculty who educate within this program.

## Hospitality and Resort Management Major (B.B.A.)

### A. University General Education Program (48 hours)

See page 57 for the University General Education Program requirements. Note that MATH 1830 (*Mathematics* requirement) and ECON 2110 and 2120 (*Social Science* requirement) are specified for the B.B.A. degree.

### B. College and Degree (B.B.A.) Requirements (45 hours)

*Lower Division Business Core Curriculum (15 hours)*

ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
ISDS 2749 Introduction to Business Microcomputer Applications (3)
ISDS 2755 Introduction to Management Information Systems (3)

*Upper Division Business Core Curriculum (30 hours)*

Minimum grade of "C" (2.0) and 2.25 GPA in the following courses:
FIR 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
ECON 4112 Organizational Economics (3)

Choose One:

MGMT 4810 International Management (3); MKTG 4530 International Marketing (3); ECON 4350 International Economics (3); FIR 4550International Finance (3); MGMT 4510 International Business Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Data (3); HPRM 4400 International Hospitality (3); ISDS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair.

Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

### C. The Major (25 hours)

A minimum of 22 semester hours in courses as follows: HPRM 2000, 3330, 4111 (1), 4315, 4320, 4400, 4600, 4700, and 3 additional hours selected with the approval of the advisor from: HPRM 3010, 3600, 4322, 4331, 4340, 4350.

### D. Electives (9 hours)

Lower division or upper division courses to bring the total of non-business hours earned to 62. CSED 2301 is suggested as an elective. Note: Economics courses other than the required courses of ECON 2110, 2120, and 4112 will not count as non-business course work.

### E. Computer Literacy

This requirement is met by successfully passing ISDS 2749, ISDS 2755, and other required courses.

## Typical 4-Year Hospitality and Resort Management Sequence

| | | | |
|---|---|---|---|
| | **Freshman Year** | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Hist/Phil Heritage* | 3 | Elective | 3 |
| HPRM 2000 | 3 | ISDS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | 16 hrs | | 16 hrs |
| | **Sophomore Year** | | |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| Literary Heritage* | 3 | ISDS 2755 | 3 |
| Hist/Phil Heritage* | 3 | Elective | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 17 hrs | | 17 hrs |
| | **Junior Year** | | |
| HPRM 3330 | 3 | HPRM 4315 | 3 |
| HPRM 4440 | 3 | HPRM 4320 | 3 |
| ISDS 3711 [C] | 3 | FIR 3410 | 3 |
| MGMT 3110 | 3 | FIR 3130 | 3 |
| MKTG 3010 | 3 | MGMT 3510 [W] | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| | **Senior Year** | | |
| HPRM 4111 | 1 | HPRM 4700 | 3 |
| HPRM 4600 | 3 | HPRM elective | 3 |
| ECON 4112 | 3 | American Heritage* | 3 |
| ISDS 3510 | 3 | MGMT 4710 [I] | 3 |
| American Heritage* | 3 | Fine Arts Heritage* | 3 |
| Semester Totals | 13 hrs | | 15 hrs |

Total Hours: 124

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

# INTERNATIONAL BUSINESS

## Interdisciplinary Program

The International Business Major prepares undergraduate business students for entry-level careers in international busi-

ness fields through a broad, interdisciplinary curriculum that combines theoretical and practical international business study with course work in the liberal arts, including foreign language and area studies.

For further information concerning this program, contact the International Business advisor (Wang Center), or The Fogelman College of Business and Economics Advising Office.

## International Business Major (B.B.A.)

### A. University General Education Program (48 hours)

See page 57 for the University General Education Program requirements. Note that MATH 1830 (*Mathematics* requirement) and ECON 2110 and 2120 (*Social Science* requirement) are specified for the B.B.A. degree.

### B. College and Degree (B.B.A.) Requirements (45 hours)

*Lower Division Business Core Curriculum (15 hours)*

ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
ISDS 2749 Introduction to Business Microcomputer Applications (3)
ISDS 2755 Introduction to Management Information Systems (3)

*Upper Division Business Core Curriculum (30 hours)*

Minimum grade of "C" (2.0) and 2.25 GPA in the following courses:
FIR 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
ECON 4112 Organizational Economics (3)
Choose One:

MGMT 4810, International Management (3); MKTG 4530 International Marketing (3); ECON 4350 International Economics (3); FIR 4550 International Finance (3); MGMT 4510 International Business Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce (3); HPRM 4400 International Hospitality (3); ISDS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair.

Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

### C. The Major (18-24 hours)

Foreign Language: 6 semester hours in one modern foreign language at or above the 2000 level or equivalent.

A minimum of 12 semester hours in from the following: ECON 3580, 4120, 4340, 4350, 4351; FIR 3710, 3770, 4110-4119 (with advance approval by department chair), 4510, 4511; MGMT 4510, 4810; MKTG 3610, 3630, 4080, 4530, 4570, 4620

### D. Electives (7-13 hours)

Lower division or upper division courses to bring the total of non-business hours earned to 62. See International Business advisor for recommended electives in global and area studies. Note: Economics courses other than the required courses of ECON 2110, 2120, and 4112 will not count as non-business course work.

### E. Computer Literacy

This requirement is met by successfully passing ISDS 2749, ISDS 2755, and other required courses.

## International Business Minor

*For students whose major is in another department in The Fogelman College of Business and Economics:* 12 hours from the following courses with the approval of the International Business advisor: ECON 4340, 4350, 4351; FIR 4110-4119 (with advance approval from department chair), 4550; MGMT 4510, 4810; MKTG 4530, 4570, 4620.

*For students whose major is in another college of the University:* The student will take a minimum of 18 hours in The Fogelman College of Business and Economics, at least 9 hours of which must be chosen from the following: ECON 4340, 4350, 4351; FIR 4110-4119 (with advance approval from department chair), 4550; MGMT 4510, 4810; MKTG 4530, 4570, 4620. The necessary prerequisites for the above courses appear below in parentheses:

ECON 4340 (ECON 2110); ECON 4350 (ECON 2120); ECON 4351 (ECON 2110); FIR 4550 (FIR 3410); MGMT 4510 (MGMT 3510); MGMT 4810 (MGMT 3110); MKTG 4530 (MKTG 3010); MKTG 4570 (MKTG 3010).

## Pre-Professional Business Administration Minor

The Fogelman College of Business and Economics offers a pre-professional minor (30 hours) for students whose major is in another college of the University. Requirements are as follows: ACCT 2010, 2020; ECON 2110, 2120; ISDS 2710, 2749; FIR 3130, 3410; MGMT 3110; MKTG 3010. Accounting and economics courses, and junior standing are prerequisites for 3000 level courses.

## Typical 4-Year International Business Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Foreign Language | 3 | Foreign Language | 3 |
| Elective** | 2-3 | ISDS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | 15-16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| Literary Heritage* | 3 | ISDS 2755 | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 17 hrs | | 17 hrs |
| **Junior Year** | | | |
| MGMT 3510 [W] | 3 | ISDS 3510 | 3 |
| FIR 3130 | 3 | FIR 3410 | 3 |
| ISDS 3711 [C] | 3 | MKTG 3010 | 3 |
| MGMT 3110 | 3 | Fine Arts Heritage* | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| **Senior Year** | | | |
| MAJOR elective | 3 | MAJOR elective | 3 |
| MAJOR elective | 3 | American Heritage* | 3 |
| American Heritage* | 3 | Intl Business elective | 3 |
| ECON 4112 | 3 | MGMT 4710 [I] | 3 |
| Elective | 2-3 | MAJOR elective | 3 |
| Semester Totals | 14-15 hrs | | 15 hrs |

Total Hours: 124-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

**MGMT 1010 recommended

# LOGISTICS/SUPPLY CHAIN MANAGEMENT

## Department of Marketing and Supply Chain Management

The objective of the Marketing program is to provide a broad view of the marketing process and to develop an understanding of all the factors involved in the marketing of goods and services.

Logistics/Supply Chain Management majors study the details of logistics management as well as an analysis of the political and competitive environment in which logistics practitioners must function. Additionally, numerous distribution functions such as warehousing, inventory management, order processing, and distribution planning are covered.

## Logistics/Supply Chain Management Major (B.B.A.)

### A. University General Education Program (48 hours)

See page 57 for the University General Education Program requirements. Note that MATH 1830 (*Mathematics* requirement) and ECON 2110 and 2120 (*Social Science* requirement) are specified for the B.B.A. degree.

### B. College and Degree (B.B.A.) Requirements (45 hours)

*Lower Division Business Core Curriculum (15 hours)*

ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
ISDS 2749 Introduction to Business Microcomputer Applications (3)
ISDS 2755 Introduction to Management Information Systems (3)

*Upper Division Business Core Curriculum (30 hours)*

Minimum grade of "C" (2.0) and 2.25 GPA in the following courses:
FIR 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
ECON 4112 Organizational Economics (3)

Choose One:

MGMT 4810 International Management (3); MKTG 4530,International Marketing (3); ECON 4350 International Economics (3); FIR 4550 International Finance (3); MGMT 4510 International Business Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce (3); HPRM 4400 International Hospitality (3); ISDS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair.

Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

### C. The Major (21 hours)

A minimum of 21 upper division semester hours in marketing courses as follows: MKTG 3610, 3620, 3630, ISDS 3765, 4510, 4511, and 3 semester hours chosen by the student from the following courses: MKTG 4470, 4570, 4620, ISDS 3760, 4512, 4760.

### D. Electives (13 hours)

Lower division or upper division courses to bring the total of non-business hours earned to 62. Note: Economics courses other than the required courses of ECON 2110, 2120, and 4112 will not count as non-business course work.

### E. Computer Literacy

This requirement is met by successfully passing ISDS 2749, ISDS 2755, and other required courses.

## Logistics/Supply Chain Management Minor

*For students whose major is in another college of the University (27 hours):* MKTG 3010, 3610, 3620, 3630, ISDS 3510, 3711, 3765, 4510, 4511.

*For students whose major is in another department in the Fogelman College of Business and Economics (12 hours):* MKTG 3610, 3620, ISDS 4511 and three semester hours chosen by the student from the following: MKTG 3630, 4470, 4570, 4620, 4620, ISDS 3760, 3765, 4510, 4512, 4760.

## Typical 4-Year Logistics/Supply Chain Management Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Elective** | 2-3 | ISDS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | 15-16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| Literary Heritage* | 3 | ISDS 2755 | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 17 hrs | | 17 hrs |
| **Junior Year** | | | |
| MGMT 3510 [W] | 3 | MKTG 3610 | 3 |
| FIR 3130 | 3 | ISDS 3765 | 3 |
| ISDS 3711[C] | 3 | ISDS 3510 | 3 |
| MGMT 3110 | 3 | FIR 3410 | 3 |
| MKTG 3010 | 3 | Elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| **Senior Year** | | | |
| MKTG 3620 | 3 | MKTG 3630 | 3 |
| ISDS 4510 | 3 | ISDS 4511 | 3 |
| Major elective | 3 | Intl Business elective | 3 |
| ECON 4112 | 3 | MGMT 4710 [I] | 3 |
| Fine Arts Heritage* | 3 | Elective | 2-3 |
| Semester Totals | 15 hrs | | 14-15 hrs |

Total Hours: 124-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

**MGMT 1010 recommended

# MANAGEMENT

## Department of Management

The effective manager of today must have competence in many disciplines, an understanding of a wide variety of relationships, and the ability to analyze evolving management requirements. Regardless of the functional specialty, the professional manager must also be a leader of people who knows how to organize and motivate groups of people serving the goals of the organization.

Effective adaptation of management to such emergent conditions as the continued growth of science and technology, populations, and large scale organization demands a thorough grasp of management process theory including planning, organizing, directing, and controlling of operations.

The Management major is designed to provide students with a basic understanding of management concepts, theories and principles, which will be useful in all kinds of organizations. All management majors take courses in management principles, business communication, human resources administration, organizational behavior, international management, and strategic management. These courses and others are designed to develop knowledge of organizations and administrative processes and enhance skills in interpersonal relations, written and oral communication, and work project development and completion. The program in management is intended to promote the development of general knowledge and skills which can be applied in virtually any organizational setting and which will continue to be important in the future. In addition to required core courses in management, students select among several more specialized courses to complete their majors.

## Management Major (B.B.A.)

### A. University General Education Program (48 hours)

See page 57 for the University General Education Program requirements. Note that MATH 1830 (*Mathematics* requirement) and ECON 2110 and 2120 (*Social Science* requirement) are specified for the B.B.A. degree.

### B. College and Degree (B.B.A.) Requirements (45 hours)

*Lower Division Business Core Curriculum (15 hours)*

ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
ISDS 2749 Introduction to Business Microcomputer Applications (3)
ISDS 2755 Introduction to Management Information Systems (3)

*Upper Division Business Core Curriculum (30 hours)*

Minimum grade of "C" (2.0) and 2.25 GPA in the following courses:
FIR 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
ECON 4112 Organizational Economics (3)

Choose One:

MGMT 4810 International Management (3); MKTG 4530 International Marketing (3); ECON 4350 International Economics (3); FIR 4550 International Finance (3); MGMT 4510 International Business Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce (3); HPRM 4400 International Hospitality (3); ISDS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair.

Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

### C. The Major (21 hours)

A minimum of 21 upper division semester hours including MGMT 3215, 4420, and either MGMT 4510 or MGMT 4810.

The additional 12 hours of the 21 hour minimum for the major can be selected from the following: MGMT 4240, 4251, 4260, 4410, 4510, 4810, 4820, 4910, 4110-19, a maximum of 6 hours from the following courses: MKTG 4410, HPRM 4315, HPRM 4330, HPRM 4380.

### D. Electives (14 hours)

Lower division or upper division courses to bring the total of non-business hours earned to 64. Note: Economics courses other than the required courses of ECON 2110, 2120, and 4112 will not count as non-business course work.

### E. Computer Literacy

This requirement is met by successfully passing ISDS 2749, ISDS 2755, and other required courses.

## Management Minor

*For students whose major is in another department in The Fogelman College of Business and Economics (12 hours):* MGMT 3215, 4420, and 6 upper division semester hours in management courses.

*For students whose major is within another college of the University (18 hours):* MGMT 3110, 3215, 4420; ISDS 3510; and 6 upper division semester hours in management courses.

## Typical 4-Year Management Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Elective** | 2-3 | ISDS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | 15-16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| Literary Heritage* | 3 | ISDS 2755 | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 17 hrs | | 17 hrs |
| **Junior Year** | | | |
| MGMT elective | 3 | MGMT 4420 | 3 |
| FIR 3130 | 3 | MGMT 3215 | 3 |
| ISDS 3711 [C] | 3 | FIR 3410 | 3 |
| MGMT 3110 | 3 | MGMT 3510 [W] | 3 |
| MKTG 3010 | 3 | Elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| **Senior Year** | | | |
| MGMT 4510 or 4810 | 3 | MGMT elective | 3 |
| MGMT elective | 3 | MGMT elective | 3 |
| ECON 4112 | 3 | Intl Business elective | 3 |
| ISDS 3510 | 3 | MGMT 4710 [I] | 3 |
| Fine Arts Heritage* | 3 | Elective | 2-3 |
| Semester Totals | 15 hrs | | 14-15 hrs |

Total Hours: 124-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

**MGMT 1010 recommended

# MANAGEMENT INFORMATION SYSTEMS

## Department of Management Information Systems

Managers and non-managers alike depend upon information for decision making. To be useful that information must be

understandable, timely, thorough, focused on the decision at hand, and in the hands of the appropriate individual. Accomplishing all this is the challenge of Management Information Systems. It requires a knowledge of individual and/or group behavior, the process of perception (how people select and interpret information), the decision tools they need, computers and communication technology, systems design, managing data, and the impact individual decisions have on the organization.

Management Information Systems includes several specialized areas including Artificial Intelligence, Expert Systems, Telecommunications, Management Information Systems Planning, Statistics, Data Base Management, System Development, Electronic Commerce, and general applications of computers to business.

Many Management Information Systems courses require substantial hands-on experience in computer labs. Therefore, the department does not allow credit by examination for upper division courses.

## Management Information Systems Major (B.B.A.)

### A. University General Education Program (48 hours)

See page 57 for the University General Education Program requirements. Note that MATH 1830 (*Mathematics* requirement) and ECON 2110 and 2120 (*Social Science* requirement) are specified for the B.B.A. degree.

### B. College and Degree (B.B.A.) Requirements (45 hours)

*Lower Division Business Core Curriculum (15 hours)*

ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
ISDS 2749 Introduction to Business Microcomputer Applications (3)
ISDS 2755 Introduction to Management Information Systems (3)

*Upper Division Business Core Curriculum (30 hours)*

Minimum grade of "C" (2.0) and 2.25 GPA in the following courses:
FIR 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
ECON 4112 Organizational Economics (3).

Choose One:

MGMT 4810 International Management (3); MKTG 4530 International Marketing (3); ECON 4350 International Economics (3); FIR 4550 International Finance (3); MGMT 4510 International Business Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce (3); HPRM 4400 International Hospitality (3); ISDS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair.

Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

### C. The Major (24 hours)

Completion of ISDS 2770 and a minimum of 21 upper division hours, including ISDS 3745, 3770, 3775, 3790 and 4800. The additional six hours will be satisfied by two of the following: ISDS 3755, 3780, 4310, 4760, 4795 or COMP 4262.

ISDS 2770 must be completed prior to taking any upper division courses in the major.

### D. Electives (7 hours)

Lower division or upper division courses to bring the total of non-business hours earned to 62. Note: Economics courses other than the required courses of ECON 2110, 2120, and 4112 will not count as non-business course work.

### E. Computer Literacy

This requirement is met by successfully passing ISDS 2749, ISDS 2755, and other required courses.

## Management Information Systems Minor

*For students whose major is in another department in the Fogelman College of Business and Economics (12 hours):* ISDS 3770, 3775, 3790, 4800.

*For students whose major is within another college of the University (18 hours):* ISDS 2749, 2755, 3770, 3775, 3790 and 4800.

## Typical 4-Year Management Information Systems Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Elective** | 2-3 | ISDS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | 15-16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| Literary Heritage* | 3 | ISDS 2770 | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2755 | 3 | ISDS 2710 | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 17 hrs | | 17 hrs |
| **Junior Year** | | | |
| ISDS 3745 | 3 | ISDS 3770 | 3 |
| ISDS 3775 | 3 | ISDS 3790 | 3 |
| ISDS 3711[C] | 3 | FIR 3410 | 3 |
| MGMT 3110 | 3 | MKTG 3010 | 3 |
| COMM 2381 | 3 | Elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| **Senior Year** | | | |
| MIS elective | 3 | MIS elective | 3 |
| FIR 3130 | 3 | ISDS 4800 | 3 |
| ECON 4112 | 3 | Intl Business elective | 3 |
| MGMT 3510 [W] | 3 | MGMT 4710 [I] | 3 |
| Fine Arts Heritage* | 3 | ISDS 3510 | 3 |
| | | Elective | 2-3 |
| Semester Totals | 15 hrs | | 17-18 hrs |

Total Hours: 127-129

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

**MGMT 1010 recommended

# MARKETING MANAGEMENT

## Department of Marketing and Supply Chain Management

The objective of the Marketing Management program is to provide a broad view of the marketing process and to develop an understanding of all the factors involved in the marketing of goods and services.

Marketing Management majors study the practical application of marketing concepts, including procedures for devel-

oping promotion, pricing, distribution, and sales management strategies. Additionally, instruction is provided in market research, buyer behavior issues, and a variety of market programming topics.

## Marketing Management Major (B.B.A.)

### A. University General Education Program (48 hours)

See page 57 for the University General Education Program requirements. Note that MATH 1830 (*Mathematics* requirement) and ECON 2110 and 2120 (*Social Science* requirement) are specified for the B.B.A. degree.

### B. College and Degree (B.B.A.) Requirements (45 hours)

*Lower Division Business Core Curriculum (15 hours)*

ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
ISDS 2749 Introduction to Business Microcomputer Applications (3)
ISDS 2755 Introduction to Management Information Systems (3)

*Upper Division Business Core Curriculum (30 hours)*

Minimum grade of "C" (2.0) and 2.25 GPA in the following courses:
FIR 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
ECON 4112 Organizational Economics (3)

Choose One:

MGMT 4810 International Management (3); MKTG 4530 International Marketing (3); ECON 4350 International Economics (3); FIR 4550 International Finance (3); MGMT 4510 International Business Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce (3); HPRM 4400 International Hospitality (3); ISDS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair.

Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

### C. The Major (21 hours)

A minimum of 21 upper division semester hours in marketing courses as follows: MKTG 3012, 3140, 3610, 4080, 4901, and six semester hours chosen by the student from the following: MKTG 3320, 3410, 3620, 4220, 4230, 4240, 4410, 4470, 4530, 4570, 4790, 4920-29.

### D. Electives (13 hours)

Lower division or upper division courses to bring the total of non-business hours earned to 62. Note: Economics courses other than the required courses of ECON 2110, 2120, and 4112 will not count as non-business course work.

### E. Computer Literacy

This requirement is met by successfully passing ISDS 2749, ISDS 2755, and other required courses.

## Marketing Management Minor

*For students whose major is in another college of the University:* (24 hours) ACCT 2010; ECON 2120; and MKTG 3010, 3012, 3140, 3610, and six semester hours chosen by the student from the following: MKTG 3320, 3410, 3620, 4220, 4230, 4240, 4410, 4470, 4530, 4570, 4790, 4920-29.

*For students whose major is in another department in The Fogelman College of Business and Economics (12 hours):* MKTG 3012, 3140, 3610, and three semester hours chosen by the student from the following: MKTG 3320, 3410, 3620, 4220, 4230, 4240, 4410, 4470, 4530, 4570, 4790, 4920-29.

## Typical 4-Year Marketing Management Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Elective** | 2-3 | ISDS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | 15-16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| Literary Heritage* | 3 | ISDS 2755 | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 17 hrs | | 17 hrs |
| **Junior Year** | | | |
| MGMT 3510 [W] | 3 | MKTG 3012 | 3 |
| FIR 3130 | 3 | MKTG 3140 | 3 |
| ISDS 3711 [C] | 3 | MKTG elective | 3 |
| MGMT 3110 | 3 | FIR 3410 | 3 |
| MKTG 3010 | 3 | Elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| **Senior Year** | | | |
| MKTG 3610 | 3 | MGMT elective | 3 |
| MKTG 4080 | 3 | MKTG 4901 | 3 |
| ECON 4112 | 3 | Intl Business elective | 3 |
| ISDS 3510 | 3 | MGMT 4710 [I] | 3 |
| Fine Arts Heritage* | 3 | Elective | 2-3 |
| Semester Totals | 15 hrs | | 14-15 hrs |

Total Hours: 124-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

**MGMT 1010 recommended

# REAL ESTATE

## Department of Finance

Real Estate majors will be provided the basic theories and practices of urban land use and economics. Exposure will be to real estate principles, valuation, investment analysis and finance, legal environment, and development.

## Real Estate Major (B.B.A.)

### A. University General Education Program (48 hours)

See page 57 for the University General Education Program requirements. Note that MATH 1830 (*Mathematics* requirement) and ECON 2110 and 2120 (*Social Science* requirement) are specified for the B.B.A. degree.

### B. College and Degree (B.B.A.) Requirements (45 hours)

*Lower Division Business Core Curriculum (15 hours)*

ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
ISDS 2749 Introduction to Business Microcomputer Applications (3)
ISDS 2755 Introduction to Management Information Systems (3)

*Upper Division Business Core Curriculum (30 hours)*
Minimum grade of "C" (2.0) and 2.25 GPA in the following courses:
FIR 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
ECON 4112 Organizational Economics (3)

Choose One:

MGMT 4810 International Management (3); MKTG 4530 International Marketing (3); ECON 4350 International Economics (3); FIR 4550 International Finance (3); MGMT 4510 International Business Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce (3); HPRM 4400 International Hospitality (3); ISDS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair.

Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

### C. The Major (21 hours)

A minimum of 21 upper division semester hours in courses, as follows: FIR 3310, 4310, 4320, 4340, 4350, and a minimum of 6 additional upper division hours in courses selected with the approval of the advisor.

### D. Electives (10 hours)

Lower division or upper division courses to bring the total of non-business hours earned to 62. Note: Economics courses other than the required courses of ECON 2110, 2120, and 4112 will not count as non-business course work.

### E. Computer Literacy

This requirement is met by successfully passing ISDS 2749, ISDS 2755, and other required courses.

## Real Estate Minor

*For students whose major is in another department in The Fogelman College of Business and Economics: (9 hours)* FIR 3310, and six additional upper division hours in real estate approved by the department chair.

*For students whose major is within another college of the University: (21 hours)* ACCT 2010; ECON 2110; FIR 3011, 3130, 3310, and six additional upper division hours in real estate approved by the department chair.

## Typical 4-Year Real Estate Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Elective** | 2-3 | ISDS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | 15-16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| Literary Heritage* | 3 | ISDS 2755 | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 17 hrs | | 17 hrs |
| **Junior Year** | | | |
| FIR 3310 | 3 | FIR 4310 | 3 |
| FIR 3410 | 3 | Real Estate elective | 3 |
| ISDS 3711 [C] | 3 | ISDS 3510 | 3 |
| MGMT 3110 | 3 | MGMT 3510 [W] | 3 |
| MKTG 3010 | 3 | Elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| **Senior Year** | | | |
| FIR 4320 | 3 | FIR 4350 | 3 |
| FIR 4340 | 3 | Real Estate elective | 3 |
| FIR 3130 | 3 | Intl Business elective | 3 |
| ECON 4112 | 3 | MGMT 4710 [I] | 3 |
| Fine Arts Heritage* | 3 | Elective | 2-3 |
| Semester Totals | 15 hrs | | 14-15 hrs |

Total Hours: 124-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

**MGMT 1010 recommended

# RISK MANAGEMENT AND INSURANCE

## Department of Finance

Risk Management and Insurance majors study risk theory, risk management; life, health, and property-liability insurance and their relationships to other disciplines in business administration.

## Risk Management and Insurance Major (B.B.A)

### A. University General Education Program (48 hours)

See page 57 for the University General Education Program requirements. Note that MATH 1830 (*Mathematics* requirement) and ECON 2110 and 2120 (*Social Science* requirement) are specified for the B.B.A. degree.

### B. College and Degree (B.B.A.) Requirements (45 hours)

*Lower Division Business Core Curriculum (15 hours)*
ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
ISDS 2749 Introduction to Business Microcomputer Applications (3)
ISDS 2755 Introduction to Management Information Systems (3)

*Upper Division Business Core Curriculum (30 hours)*
Minimum grade of "C" (2.0) and 2.25 GPA in the following courses:
FIR 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
ECON 4112 Organizational Economics (3)

Choose One:

MGMT 4810 International Management (3); MKTG 4530 International Marketing (3); ECON 4350 International Economics (3); FIR 4550 International Finance (3); MGMT 4510 International Business Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Tourism (3); HPRM 4400 International Hospitality (3); ISDS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair.

Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

**C. The Major (21 hours)**

A minimum of 21 upper division semester hours in courses as follows: FIR 3810, 4810, 4820, 4870, and 9 additional upper division hours in courses selected with the approval of the advisor.

**D. Electives (10 hours)**

Lower division or upper division courses to bring the total of non-business hours earned to 62. Note: Economics courses other than the required courses of ECON 2110, 2120, and 4112 will not count as non-business course work.

**E. Computer Literacy**

This requirement is met by successfully passing ISDS 2749, ISDS 2755, and other required courses.

## Risk Management and Insurance Minor

*For students whose major is in another department in The Fogelman College of Business and Economics: (9 hours)* FIR 3810, 4870, and three additional upper division hours in insurance approved by the department chair.

*For students whose major is within another college of the University: (21 hours)* ACCT 2010, ECON 2110, ISDS 2710, FIR 3011, 3810, 4870, and three additional upper division hours in insurance or finance approved by the department chair.

### Typical 4-Year Risk Management & Insurance Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Elective** | 2-3 | ISDS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | 15-16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| Literary Heritage* | 3 | ISDS 2755 | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 17 hrs | | 17 hrs |
| **Junior Year** | | | |
| FIR 4870 | 3 | FIR 3810 | 3 |
| FIR 3410 | 3 | FIR 3130 | 3 |
| ISDS 3711 [C] | 3 | ISDS 3510 | 3 |
| MGMT 3110 | 3 | MGMT 3510 [W] | 3 |
| MKTG 3010 | 3 | Elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| **Senior Year** | | | |
| FIR 4810 | 3 | Risk Mgmt elective | 3 |
| FIR 4820 | 3 | Risk Mgmt elective | 3 |
| Risk Mgmt elective | 3 | Intl Business elective | 3 |
| ECON 4112 | 3 | MGMT 4710 [I] | 3 |
| Fine Arts Heritage* | 3 | Elective | 2-3 |
| Semester Totals | 15 hrs | | 14-15 hrs |

Total Hours: 124-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

**MGMT 1010 recommended

# SALES

## Department of Marketing and Supply Chain Management

The objective of the Sales program is to provide a broad view of the marketing process and to develop an understanding of all the factors involved in the marketing of goods and services.

Sales majors are taught practical and theoretical sales and sales management skills. Particular emphasis is placed on interpersonal communication techniques and on the practical application of the marketing concepts as they apply to sales and sales management.

## Sales Major (B.B.A.)

**A. University General Education Program (48 hours)**

See page 57 for the University General Education Program requirements. Note that MATH 1830 (*Mathematics* requirement) and ECON 2110 and 2120 (*Social Science* requirement) are specified for the B.B.A. degree.

**B. College and Degree (B.B.A.) Requirements (45 hours)**

*Lower Division Business Core Curriculum (15 hours)*

ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
ISDS 2749 Introduction to Business Microcomputer Applications (3)
ISDS 2755 Introduction to Management Information Systems (3)

*Upper Division Business Core Curriculum (30 hours)*

Minimum grade of "C" (2.0) and 2.25 GPA in the following courses:
FIR 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
ECON 4112 Organizational Economics (3)

Choose One:

MGMT 4810 International Management (3); MKTG 4530 International Marketing (3); ECON 4350 International Economics (3); FIR 4550 International Finance (3); MGMT 4510 International Business Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce (3); HPRM 4400 International Hospitality (3); ISDS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair.

Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

**C. The Major (21 hours)**

A minimum of 21 upper division semester hours in marketing courses as follows: MKTG 3410, 4080, 4410, 4470, 4901, and six semester hours chosen by the student from the following: MKTG 3012, 3140, 3320, 3610, 4220, 4240, 4490, 4790.

**D. Electives (10 hours)**

Lower division or upper division courses to bring the total of non-business hours earned to 62. Note: Economics courses other than the required courses of ECON 2110, 2120, and 4112 will not count as non-business course work.

**E. Computer Literacy**

This requirement is met by successfully passing ISDS 2749, ISDS 2755, and other required courses.

## Sales Minor

*For students whose major is in another college of the University (24 hours):* ACCT 2010; ECON 2120; MKTG 3010, 3410, 4410, 4470, and 6 semester hours chosen by the student from the following courses: MKTG 3012, 3140, 3320, 3610, 4220, 4240, 4490, 4790.

*For students whose major is in another department in The Fogelman College of Business and Economics (12 hours):* MKTG 3410, 4410, 4470, and 3 semester hours chosen by the student from the following courses: MKTG 3012, 3140, 3320, 3610, 4220, 4240, 4490, 4790.

## Typical 4-Year Sales Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Elective** | 2-3 | ISDS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | 15-16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| Literary Heritage* | 3 | ISDS 2755 | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 17 hrs | | 17 hrs |
| **Junior Year** | | | |
| MKTG 3410 | 3 | MGMT 3510 [W] | 3 |
| FIR 3130 | 3 | MKTG 4470 | 3 |
| ISDS 3711 [C] | 3 | MKTG elective | 3 |
| MGMT 3110 | 3 | FIR 3410 | 3 |
| MKTG 3010 | 3 | Elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| **Senior Year** | | | |
| MKTG 4410 | 3 | MKTG elective | 3 |
| MKTG 4080 | 3 | MKTG 4901 | 3 |
| ECON 4112 | 3 | Intl Business elective | 3 |
| ISDS 3510 | 3 | MGMT 4710 [I] | 3 |
| Fine Arts Heritage* | 3 | Elective | 2-3 |
| Semester Totals | 15 hrs | | 14-15 hrs |

Total Hours: 124-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

**MGMT 1010 recommended

# The College of Communication and Fine Arts

RICHARD R. RANTA, Ph.D., *Dean*
*Room 232, Communication Fine Arts Building*
*(901) 678-2350*
*http://www.people.memphis.edu/~commfinearts/*

| Department | Major | Concentration Within Major | Degree Offered |
|---|---|---|---|
| Art | Architecture | | Bachelor of Fine Arts (B.F.A.) |
| | *Art | (1) Art Education<br>(2) Ceramics, Painting, Sculpture,<br>(2) Printmaking<br>(3) Graphic Design<br>(4) Interior Design<br>(5) Photography | Bachelor of Fine Arts (B.F.A.) |
| | Art History | | Bachelor of Arts (B.A.) |
| Communication | *Communication | (1) Broadcast and Electronic Media<br>(2) Communication<br>(3) Film and Video Production | Bachelor of Arts (B.A.) |
| Journalism | *Journalism | (1) Advertising<br>(2) Broadcast News<br>(3) Internet Journalism<br>(4) Newspaper/Magazine<br>(5) Public Relations | Bachelor of Arts (B.A.) |
| Music | Music Industry | (1) Music Business<br>(2) Recording Technology | Bachelor of Music (B.M.) |
| | *Music | (1) Composition<br>(2) Jazz and Studio Composition/Arranging<br>(3) Jazz and Studio Performance<br>(4) Music History<br>(5) Performance<br>(6) Sacred Music<br>(7) School Music<br>(Choral)<br>(Instrumental) | Bachelor of Music (B.M.) |
| Theatre and Dance | *Theatre | (1) Dance<br>(2) Design and Technical Production<br>(3) Performance | Bachelor of Fine Arts (B.F.A.) |

* Minor Available; Minor also available in Photography (See Art Department).

Individual program requirements described in *The University of Memphis 2003-2004 Undergraduate Bulletin* are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this *Bulletin*; or consult the Undergraduate *Bulletin* website at: *http://www.people.memphis.edu/~acadafflib/bulletin/bulletin.htmlx* for the latest updates.

## PHILOSOPHY

The College of Communication and Fine Arts is focused ultimately upon visual and audible symbols, whose rational and emotional values it is the mission of the college to create and explore. In the belief that perception is largely shaped by experience, The College of Communication and Fine Arts offers a range of symbolically rendered experiences, both individual and collective, in the hope of broadening and sensitizing the perceptions of its students.

The kind of symbolic experience that communicates emerges when, in Ruskin's phrase, "the hand, the head and the heart of man go together." Students in The College of Communication and Fine Arts receive individual and small group instruction toward this end. In the hope of furthering the capacity to impose a pattern on experience and to recognize the patterns offered by others, students of the college are exposed additionally to courses drawn from a broad base of the liberal arts.

The faculty of the college represent a diversity of academic and artistic backgrounds and interests, reflected not only in its teaching, but also in research and creative activities. It is a faculty united in the attempt to maintain the highest standards in both classroom and studio work, standards that find their limits at last only in the mystery and wonder of the human experience from which they rise.

## PURPOSES

The College of Communication and Fine Arts has four primary functions. First, it offers courses of study aimed at preparing its students to work toward careers in the fine or applied arts, communications, or the performing arts, whether as practitioners, teachers, artists, or consultants. Second, the college affords broad exposure and instruction in fine arts and communication to students of other colleges in the University whose degree programs may be enhanced by such exposure. Third, with a view toward individual professional growth as well as general cultural enhancement, the college vigorously promotes both scholarly research and artistic production on the part of its faculty. Finally, the college seeks to enrich the cultural atmosphere of both the University and the community at large through a continuing variety of public programs, to include art exhibitions, media presentations, dramatic productions, concerts, recitals, lectures, seminars, debates, workshops, festivals, and the like.

Through the diversity of these constituent elements, the college reflects the unity and challenge facing the communicative artist and scholar. Ultimately it is our goal to foster a more intense and profound awareness of the broad range of human experience from which the college derives its pertinence and vitality.

## ORGANIZATION

The College of Communication and Fine Arts comprises five academic departments: Art, Communication, Journalism, Music, and Theatre and Dance. The requirements for the majors and minors offered by these departments are listed later in this section.

## RESIDENCE REQUIREMENTS

University residence requirements are explained in detail in the Graduation from the University section. A transfer student in The College of Communication and Fine Arts must earn a minimum of 6 semester hours in residence in the major program and a minimum of 3 semester hours in the minor. These credits may be earned only through regular class enrollment for a letter grade.

## TEACHER PREPARATION

Students enrolled in a degree program of The College of Communication and Fine Arts who wish to prepare themselves for teaching careers in the secondary schools of Tennessee may meet the state licensure requirements while pursuing their chosen majors.

### Admission to the Teacher Licensure Program

Students who plan to pursue an undergraduate program of studies which leads to K-12 Teacher Licensure must submit a formal application to the College of Education Teacher Education Program (TEP).

Students are encouraged to apply for admission to TEP as they enter the college. LEAD 2010, Teaching and Schools in Urban Settings, is designed to be the first professional course taken by students seeking licensure. Admission proceedings will be discussed in this course within the context of responsibility for one's own professional development, and the developmental nature of teaching knowledge, skills, and dispositions.

**Prerequisites for Formal Admission to the TEP are as follows:**

1. Admission application completed and submitted.
2. Minimum grade of "C" in ENGL 1010, 1020, COMM 2381, EDPR 2111, LEAD 2010, all courses in the major, and all professional education courses.
3. Satisfactory scores on the Pre-Professional Skills Test (PPST) according to the criteria established by the Tennessee State Board of Education and the College of Education, and The University of Memphis.
4. Minimum of 25 semester hours completed.
5. Overall minimum GPA of 2.5.
6. Submission of a professional portfolio prior to satisfactory completion of a personal interview.

**Conditional TEP Admission.**

1. Students who do not meet the admissions criteria will be allowed to obtain Conditional Admission only if their deficiencies can be remediated within one semester. Conditional Admission status can be secured for one semester only.
2. Conditionally approved students will be allowed to enroll in professional education courses during the next enrollment period. If at the end of the semester, they are not able to meet the criteria for admission they will be disapproved.

## DEGREE REQUIREMENTS

### Degrees Offered

A student may earn a Bachelor of Fine Arts, Bachelor of Music, or Bachelor of Arts degree, by majoring in one of the five departments that constitute the College of Communication and Fine Arts. The following is an outline of all majors and concentrations offered by the College of Communication and Fine Arts.

A minimum grade of "C" is required in every course applicable toward a major or minor.

Every student should be aware that the mere completion of courses outlined below with a minimum grade of "C" does not guarantee classification as a major or minor in the discipline concerned; the student must be recommended by the chair of

the department in which the major or minor is sought. If, in the opinion of the chair, the quality of the student's work is not high enough, additional work, the repetition of courses, or other evidences of superior scholarship may be required.

Credit in the College of Communication and Fine Arts may be granted for validated learning from experience or non-traditional instruction. Guidelines for this procedure may be obtained in the office of the Dean of the College of Communication and Fine Arts.

The college requires a one semester physical activity course. A student may elect to take the course on a credit/no credit basis. Only students in the following programs may apply more than 8 semester hours of physical activity courses toward the specified minimum degree requirement: B.F.A. Theatre major with a concentration in Performance or Dance, or a Theatre or Dance minor. In addition to PHED 1000 level courses, MUAP 2002, DANC 1821, 1825, 1827, 2821, 2825, 2827; or THEA 2501 may be selected to fulfill the physical activity requirement.

# ARCHITECTURE

## Department of Art

**NOTE:** Before enrolling in any Architecture course, all applicants seeking admission to the B.F.A. with a major in Architecture must complete and submit to the Department of Art an application form, a writing assignment, and a portfolio of five representative works. These three components comprise the Incoming Evaluation for Architecture and will be reviewed by a faculty committee. Applicants are accepted on the basis of potential in the field of architecture. Contact the Department of Art for details and deadline.

Students transferring from another major or another institution who intend to pursue a B.F.A. degree with a major in Architecture must complete the department's Incoming Evaluation prior to enrolling in Architecture courses. Transfer students seeking advanced standing in the Architecture major should submit a portfolio of work representing previously completed Architecture studio work. The review committee will determine if the portfolio work is equivalent to comparable courses at The University of Memphis. Placement in the major is dependent upon the review. Even if admitted to advanced standing, the student may be required to remedy previous course deficiencies.

## Architecture Major (B.F.A.)

### A. University General Education Program (45 hours)

See page 57 for the University General Education Program requirements. Note the following are specified by the department for this program: Mathematics: MATH 1830; Historical/Philosophical: HIST 1110 and HIST 1120; Social Science: ANTH 1200 and SOCI 1111; Natural Science: PHYS 1010/1001, 1020/1002.

### B. The Major (85 hours)

1. *Major Core (34 hours)*
   ARCH 1500, 1521, 1555, 1556, 1561, 2555; ART 1210, 1215, 1311; ARTH 2101, 2102.
   Entrance - Completion of Major Core (34 hours)
   [Candidacy Review and Portfolio Requirements - A Candidacy Review is required of all students intending to major in Architecture. Admission to The University of Memphis and completion of the major core do not guarantee placement in the program. Admission is selective and is based on a portfolio evaluation reflecting professional standards and expectations of the major. A portfolio that includes but is not limited to works from the major core courses is required as part of the application. Guidelines and application forms for admission to the Architecture major are available in the department office and from faculty advisors. Consultation with a faculty advisor is recommended before or during portfolio preparation. Students may submit portfolios for review no earlier than the semester that entrance requirements are being completed. Transfer students must meet entrance requirements of the major. After review, the department notifies the student of one of the following: (1) acceptance, (2) one semester acceptance on a probationary basis, (3) recommendation to correct the deficiencies and reapply, (4) recommendation to pursue studies in another area of art, or (5) denial of admission.] Permission to enroll in any 3000-4000 level Architecture course is based upon this review.
2. Art History (3 hours) - ARTH 4158
3. Completion of Major (48 hours) - ARCH 1562, 2556, 2561, 3401, 3471 [C], 3472, 3520, 3531, 3562, 4515, 4535, 4600, 4615, 4940, 4944 [W,I].

### C. Electives (9 hours)

Architecture, Art and Art History electives chosen to bring the total number of hours to 139. See advisor for details.

### D. Computer Literacy

This requirement is met by successfully passing ARCH 3562 or other computer courses approved by CCFA dean.

## Typical 4-Year Architecture Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ARCH 1500 | 3 | ARCH 1521 | 3 |
| ARCH 1555 | 3 | ARCH 1556 | 3 |
| ART 1210 | 3 | ARCH 1561 | 3 |
| ART 1311 | 3 | ART 1215 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| HIST 1110 | 3 | ARTH 2101 | 3 |
| Semester Totals | 18 hrs | | 18 hrs |
| **Sophomore Year** | | | |
| ARCH 1562 | 3 | ARCH 2556 | 4 |
| ARCH 2555 | 4 | ARCH 3401 | 3 |
| ARCH 2561 | 3 | ARCH 3520 | 4 |
| ARTH 2102 | 3 | ARCH 3562 | 3 |
| HIST 1120 | 3 | PHYS 1010/1001 | 4 |
| Semester Totals | 19 hrs | | 18 hrs |
| **Junior Year** | | | |
| ARCH 3471 [C] | 3 | ARCH 3472 | 3 |
| ARCH 3531 | 3 | ARCH 4515 | 4 |
| ARCH 4600 | 4 | ARCH 4535 | 3 |
| MATH 1830 | 3 | COMM 2381 | 3 |
| PHYS 1020/1002 | 4 | Literary Heritage* | 3 |
| | | HMSE 1100 | 2 |
| Semester Totals | 17 hrs | | 18 hrs |
| **Senior Year** | | | |
| Elective | 3 | Elective | 3 |
| ARCH 4615 | 4 | ARCH 4944 [W,I] | 3 |
| ARCH 4940 | 1 | SOCI 1111 | 3 |
| ARTH 4158 | 3 | American Heritage* | 3 |
| ANTH 1200 | 3 | PHED* | 2 |
| American Heritage* | 3 | | |
| Semester Totals | 17 hrs | | 14 hrs |

Total Hours: 139

Total Hours Required for Graduation: 139

*Must satisfy University General Education Program Requirement

# ART

## Department of Art

The Bachelor of Fine Arts with a major in Art is a professional degree, offering students the specialized training available in art schools, combined with the benefits of a broad liberal arts education. The Department of Art welcomes qualified individuals who aspire to become practicing artists and

designers. Professional art and design education is available in five concentration options: (1) Art Education; (2) Ceramics/ Painting/Printmaking/Sculpture; (3) Graphic Design; (4) Interior Design; (5) Photography.

The Department also welcomes students considering a minor in Art or in Photography. Please see the Minors section following the listing of concentration requirements for the B.F.A. in Art.

Special requirements for the Art major are divided into five groups: general education; foundation in art; art history; concentration area; electives to bring the total credit hours to 139 hours.

**Advanced Placement Credit:** Prior to registration, Advanced Placement portfolios should be reviewed in the Department of Art for consistency with the performance standards required of enrolled students. An A.P. portfolio with a score of three (3), four (4), or five (5) points on the General Portfolio or on the Drawing Portfolio will be reviewed for the possible award of three credit hours. If a student submits separate portfolios from the junior and senior years, a maximum of six credit hours may be awarded. For a grade of three (3) points on the Drawing Portfolio or three (3), four (4), or five (5) points on the General Portfolio, three hours of unassigned studio elective credit may be awarded. For a grade of four (4) or five (5) points in the Drawing Portfolio, three hours of credit in Art 1311 (Beginning Drawing) will be considered. Unassigned A.P. credit may be used to satisfy a University credit.

**Advising:** Student advising in the Department of Art is an essential support service that aids students in clarifying academic goals consistent with their interests, abilities, and resources. Academic advisors assist Art majors in the selection of appropriate courses and provide meaningful discussion regarding career goals, past academic experience, and future academic progress. Freshmen, transfer and returning students are encouraged to contact the Art Office (room 201, Jones Hall) to request an academic advisor. Assistance from an advisor does not relieve a student of the responsibility of studying the appropriate Bulletin and fulfilling all degree requirements.

Transfer students with more that 40 semester hours should see the CCFA Graduation Analyst (room 232, CFA Building) before seeing an Art advisor.

Before taking courses from another institution intended to apply toward The University of Memphis graduation, the student must obtain permission from the CCFA Dean.

**NOTES for Graphic Design Students:** Before enrolling in any Graphic Design course, all applicants seeking admission to the B.F.A. with a concentration in Graphic Design must complete and submit to the Department of Art an application form, a writing assignment, and a portfolio of five representative works. These three components comprise the Incoming Evaluation for Graphic Design and will be reviewed by a faculty committee. Applicants are accepted on the basis of potential in the field of graphic design. Contact the Department of Art for details and deadline.

Students transferring from another concentration or another institution who intend to pursue a B.F.A. degree with a concentration in Graphic Design must complete the area's Incoming Evaluation prior to enrolling in Graphic Design courses. Transfer students seeking advanced standing in the Graphic Design concentration should submit a portfolio of work representing previously completed Graphic Design studio work. The review committee will determine if the portfolio work is equivalent to comparable courses at The University of Memphis. Placement in the concentration is dependent upon the review. Even if admitted to advanced standing, the student may be required to remedy previous course deficiencies.

**NOTES for Interior Design Students:** Majors, non-majors and transfer students must follow the established sequence of Interior Design courses. All students must participate in Concentration Review. Students transferring from an interior design program at another school or university must submit a portfolio of work for evaluation and placement in the program prior to enrolling The University of Memphis Interior Design courses. Portfolio submissions must be received at least two weeks before the beginning of any semester. Portfolios received after this period will not be accepted for review. Students who have not completed the prerequisite(s), but intend to take a specific Interior Design course, may petition for enrollment by submitting a portfolio of work related to the prerequisite requirements to the course instructor for evaluation. The portfolio must be submitted no later than two weeks prior to the end of the previous semester.

## Art Major (B.F.A.)

### A. University General Education Program (45 - 48 hours)

See page 57 for the University General Education Program requirements. Note that the *Fine Arts Heritage* category is satisfied for students who meet all B.F.A. in Art requirements.

### B. The Major (90 hours)

1. *Major Core (Foundation in Art) 18 hours*
   ART 1210, 1215, 1311, 1314; ARTH 2101, 2102.
2. *Concentrations*
   [Art majors must be formally accepted into a concentration. Admission to the University and completion of foundation art courses do not guarantee placement in a concentration. Admission is selective and is based on a portfolio evaluation that reflects professional standards and meets concentration expectations. Space availability may also affect admission decisions. A concentration entrance application and a portfolio should be submitted upon completion of foundation courses (ART 1210, 1215, 1311, 1314; ARTH 2101, 2102) plus additional concentration-specific courses (see concentration areas for these courses). The portfolio includes, but is not limited to, artwork from these courses. Guidelines and application forms for concentration admission are available in the department office and from faculty advisors. Consultation with a faculty adviser is recommended before or during portfolio preparation. Transfer students must meet concentration entrance requirements. After review, the department notifies the student of one of the following: (1) acceptance, (2) one semester acceptance on a probationary basis, (3) recommendation to correct deficiencies and reapply, (4) recommendation to pursue studies in another area of art, or (5) denial of admission.]
   a. *Art Education (72 hours):*
      (1) Entrance (15 hours) - ART 2313, 3411, 2351, 2511, and 2523. Students may submit portfolios for review no earlier than the semester that the entrance requirements are being completed.
      (2) Art History (9 hours) - 3 upper division art history courses.
      (3) Completion of Concentration (39 hours) - ART 2301, 2414 (1 hour), 3416 (1 hour), 3423, 4321, 4418 (1 hour), 4427; EDPR 2111; LEAD 2010; SPED 2000; ICL 3000, 4800, 4912 (9 hrs).
      (4) Art Electives (9 hours) - A studio specialty of three or four courses in the same field is also required; see adviser for details. All required 2000 level art courses must be completed before enrollment in 4000 level studio classes. Art electives complete the 90 semester hours of professional course work.
      Note: See the introduction to the College of Communication and Fine Arts requirements at the Teacher Preparation section.
   b. *Ceramics, Painting, Printmaking, and Sculpture (72 hours):*
      The four fields are interdependent and share the following requirements:
      (1) Entrance (18 hours) - ART 2301, 2313, 2314, and three courses selected from ART 2331, 2351, 2511, 2523, 2701. Students may submit portfolios for review no earlier than the semester that the entrance requirements are being completed.
      (2) Art History (12 hours) - ARTH 4155 or 4157 plus 9 hours in upper division art history courses.
      (3) Completion of Concentration (36 hours) - Minimum of 15 hours, including ART 4610, in one of the four fields, remaining six hours of required 2000 level art courses (listed under Entrance), plus 15 hours elected from the course list that follows. All 2000 level art courses must be completed before enrollment in 4000 level studio courses.
      Ceramics: ART 3522, 3524, 4521, 4522.
      Painting: ART 3332, 4321, 4322, 4331, 4332.
      Printmaking: ART 2352, 3351, 3352, 4351, 4352, 4353, 4354.
      Sculpture: ART 3511, 3512, 4511, 4512.
      Independent Studies: ART 4621, 4622
      (4) Art Electives (6 hours) - Art electives complete the 90 semester hours of professional course work.

c. *Graphic Design (72 hours):*
(1) Entrance (12 hours) - ART 2213, 2219, 2223, 2313. Students may submit portfolios for review no earlier than the semester that the entrance requirements are being completed. Enrollment in 3000 or 4000 level graphic design courses is based upon this review.
(2) Art History (12 hours) - ART 4224 plus 3 upper division art history courses. COMM 4850 may be substituted for one art history course.
(3) Completion of Concentration (36 hours) - ART 2701, 3213, 3219, 3222, 3227, 4211, 4221, 4222, 4223, 4232 or 4233, 4235, and one of the following: ART 3225, 4223, 4230, 4232, or 4233.
(4) Art Electives (12 hours) - Art electives complete the 90 hours of professional course work.

d. *Interior Design (72 hours)*
(1) Entrance (9 hours) - ART 1233, 1234, and 1235. Student may submit portfolios for review no earlier than the semester that entrance requirements are being completed. Permission to enroll in any 3000 or 4000 level Interior Design course is based upon this review.
(2) Art History (12 hours) - ART 3103, 3104, and six hours in upper division art history courses.
(3) Completion of Concentration (39 hours) - ART 2235, 2236, 2237, 2238, 3234, 3235, 3236, 3238, 3250, 4238, 4239, 4240, 4251.
(4) Art Electives (12 hours) - Art electives complete the total of 90 semester hours of professional course work. Six of these hours must be in upper division courses.

e. *Photography (72 hours):*
(1) Entrance (24 hours) - ART 2301, 2331, 2351, 2511, 2523, 2701, 2702, and 3701. Students may submit portfolios for review no earlier than the semester that the entrance requirements are being completed. Enrollment in 3000 or 4000 level studio courses is based upon this review.
(2) Art History (12 hours) - ARTH 4155 or 4157, plus 4721 and two upper division art history courses.
(3) Completion of Concentration (27 hours) -ART 4610, 4701, 4702, 4703, 4704, 4711, (6 hours), and 4712 (6 hours).
(4) Art Electives (9 hours) - Art electives complete the 90 semester hours of course work.

3. *Graduation*
For the B.F.A. in Art, a total of 135 semester hours is required, 90 of which must be in professional course work. A minimum of 42 upper division semester hours is required for the degree and a minimum grade of "C" (2.00) is required for all courses in the Art major.

### C. Computer Literacy

This requirement is met by successfully passing ART 2301 or other computer art courses approved by the CCFA Dean. See advisor for details.

## Art Minor

Completion of 24 semester hours in art courses, 9 of which must be from the upper division. Courses selected for the minor are to be approved by the advisor who will be assigned by the department chair.

## Photography Minor

Completion of 18 semester hours as follows: ART 2701, 2702, 3701, 4701, 4702, and ARTH 4721.

## Typical 4-Year Art Education Concentration Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ART 1210 | 3 | ART 1215 | 3 |
| ART 1311 | 3 | ART 1314 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| American Heritage* | 3 | COMM 2381 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| HMSE 1100 | 2 | American Heritage* | 3 |
| Semester Totals | 18 hrs | | 19 hrs |
| **Sophomore Year** | | | |
| ART 2313 | 3 | ART 2523 | 3 |
| ART 2301 | 3 | ART 2351 | 3 |
| ART 2511 | 3 | ARTH 2102 | 3 |
| ARTH 2101 | 3 | ART 2414 | 1 |
| EDPR 2111 | 3 | ART 3411 | 3 |
| Literary Heritage* | 3 | LEAD 2010 | 3 |
| | | PHED* | 2 |
| Semester Totals | 18 hrs | | 18 hrs |
| **Summer Session Between Sophomore and Junior Year** (3-6 hrs.) | | | |
| 1st Term | | 2nd Term | |
| MATH* | 3 | MATH* | 3 |
| **Junior Year** | | | |
| ARTH elective | 3 | ART 4321 | 3 |
| ART elective | 3 | ARTH elective | 3 |
| ART 3423 | 3 | ART elective | 3 |
| SPED 2000 | 3 | ART 3416 | 1 |
| Social Science* | 3 | ICL 3000 | 3 |
| Hist/Phil Heritage* | 3 | Social Science* | 3 |
| Semester Totals | 18 hrs | | 16 hrs |
| **Senior Year** | | | |
| ARTH elective | 3 | ICL 4800 | 3 |
| ART elective | 3 | ICL 4912 | 9 |
| ART 4418 | 1 | | |
| ART 4427 | 3 | | |
| Hist/Phil Heritage* | 3 | | |
| Elective | 1-4 | | |
| Semester Totals | 14-17 hrs | | 12 hrs |

Total Hours: 133-136

Total Hours Required for Graduation: 135

*Must satisfy University General Education Program Requirement

## Typical 4-Year Interior Design Concentration Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| **ART 1233 | 3 | **ART 1314 | 3 |
| **ART 1311 | 3 | **ART 1215 | 3 |
| **ART 1210 | 3 | **ART 1235 | 3 |
| **ART 1234 | 3 | ENGL 1020 | 3 |
| ENGL 1010 | 3 | ART 2102 | 3 |
| ART 2101 | 3 | PHED* | 2 |
| Semester Totals | 18 hrs | | 17 hrs |

**NOTE: Portfolio application for Interior Design Concentration entry required in the semester that starred courses are completed

| | |
|---|---|
| **Summer Session** | |
| MATH* | 3 |
| Natural Science* | 4 |
| Summer Total | 7 hrs |

| | | | |
|---|---|---|---|
| **Sophomore Year** | | | |
| ART 2235 | 3 | ART 3236 | 3 |
| ART 2237 | 3 | ART 3235 | 3 |
| ART 3103 | 3 | ART 2236 | 3 |
| ART 2238 | 3 | ART 3104 | 3 |
| Natural Science* | 4 | COMM 2381 | 3 |
| PHED* | 2 | Literary Heritage* | 3 |
| Semester Totals | 18 hrs | | 18 hrs |

| | |
|---|---|
| **Summer Session** | |
| MATH* | 3 |
| ART elective | 3 |
| Summer Total | 6 hrs |

| | | | |
|---|---|---|---|
| | **Junior Year** | | |
| ART 3234 | 3 | ART 3250 | 3 |
| ART 3238 | 3 | ART elective | 3 |
| ARTH elective | 3 | ARTH elective | 3 |
| Social Science* | 3 | HIST 2602 | 3 |
| HIST 2601 | 3 | Hist/Phil Heritage* | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| | **Senior Year** | | |
| ART 4238 | 3 | ART 4251 | 3 |
| ART 4239 | 3 | ART 4240 | 3 |
| ART elective | 3 | ART elective | 3 |
| Hist/Phil Heritage* | 3 | Elective | 1 |
| Social Science* | 3 | | |
| Semester Totals | 15 hrs | | 10 hrs |

Total Hours: 139

Total Hours Required for Graduation: 139

*Must satisfy University General Education Program Requirement

# ART HISTORY

## Department of Art

## Art History Major (B.A.)

### A. University General Education Program (48 - 51 hours)

See page 57 for the University General Education Program requirements.

### B. Bachelor of Arts (B.A.) (18-19 hours)

These hours are in addition to the University General Education Program requirements.

Foreign Language: 6 hours in a single foreign language at or above the 2000 level or equivalent.

1. If the language chosen was used to meet University admissions requirements, students must take the foreign language placement exam (if they have not already successfully completed a language course at an accredited institution of higher education). For information about the dates and place of placement exams, contact the Department of Foreign Languages and Literatures. On the basis of the results of the placement exam, students should follow these guidelines:
   If placed into 1010: complete 1010, 1020, 2010, 2020
   If placed into 1020: complete 1020, 2010, 2020
   If placed into 2010: complete 2010, 2020
   If placed into 2020: complete 2020
   If placed into 3301 or higher: language requirement fulfilled
   Or complete 6 hours at the 2000 level or above of another language
2. Students presenting a language to meet University admission requirements cannot receive credit for 1010 in that language.
3. No credit hours are immediately granted on the basis of the placement exam.
4. Satisfactory completion of the language requirement by means of the placement exam will be noted on the student's transcript.
5. Students whose first college-level language course is 2010 or higher and who pass this course with a minimum grade of "C" may apply for Credit by Course Placement. The applicable fees are listed in the Miscellaneous Fees section of this *Bulletin*. Students wishing such credit must make written application to the chair of the Department of Foreign Languages and Literatures. Credit by Course Placement shall apply only to the lower division, and credit gained in this manner shall not exceed 12 semester hours in any one language. For additional information, see Credit by Course Placement in Section 5 of this *Bulletin*.
6. Once a student begins with a lower-division course, all remaining higher-numbered courses in the lower division must be taken in sequence, without skipping. For example, students who begin with LATN 1010 cannot skip LATN 1020 and enroll in LATN 2010.
7. For students whose mother tongue is not English, lower-division credit in the native language will be awarded when the student has successfully completed the English composition requirement for graduation and has proven proficiency in the native language to the satisfaction of the Department of Foreign Languages and Literatures. The student must make written application to the chair of the Department of Foreign Languages and Literatures.

Humanities: 3 hours of upper-division coursework, in an area outside of the major, to be chosen from one of the following categories. Please note that some courses have prerequisites:

1. Any upper-division literature course in CHIN, CLAS, ENGL, FREN, GERM, GREK, ITAL, JAPN, LALI, LATN, RUSS, or SPAN. Students should consult with their advisor or with the department to determine the appropriated courses.
2. Any upper-division HIST course, **except** HIST 2030, 3045, 3300, 3863, 4020, 4022, 4851, 4871, 4881, 4998, 4999.
3. Any upper-division PHIL course.
4. Judaic Studies: JDST 3201, 3202, 3661, 3801, 3802, 4671.
5. Political Thought: POLS 3102, 3401, 3402, 4405, 4415, 4416.
6. THEA 4852

*Fine Arts Heritage:* 3 hours (in a different subject area than University General Education Program requirement) from: ART 1030, ARTH 2101, COMM 1851, COMM 4850, COMM 4858, DANC 1151, DANC 3101, MUS 1030, MUHL 4800, THEA 1030, THEA 4551, THEA 4552.

*Mathematics/Natural Sciences:* 3-4 hours of Mathematics or Natural Sciences, in an area outside of the major.

1. Mathematics: one MATH course (in a different subject area than University General Education Program requirements), or PHIL 1611.
2. Natural Sciences: 3-4 hours (different from the University General Education Program science), selected from: BIOL/MMCS 1010/1011, BIOL 1020/1021; BIOL/MMCS 1110/1111, BIOL 1120/1121; CHEM 1010/1011, 1020/1021; CHEM 1110/1111, 1120/1121; GEOG 1003, 1010/1011, 1020/1021, 3221, 4120, 4122, 4201, 4211, 4231, 4241; GEOL 1040/1050, 1103, 3802; PHYS 1010/1001, 1020/1002; PHYS 2010/2011, 2020/2021, 2110/2111, 2120/ 2121; PSYC 3306 (if University General Education Program sequence is not biology); UNHP 3407; UNIV 1610, 1611. NOTE: If a course has a lab, the lab must also be taken to complete this requirement.

*Social Science:* 3 hours of a Social Science (in addition to University General Education Program requirements) in an area outside of the major. No more than two courses from one discipline may be used to fulfill the University General Education Program and B.A. Social Science requirements. Coursework to be chosen from: AAAS 2100, ANTH 1100, 1200; CJUS 1100, 2110, 3510; COMM 1780, 4375; ECON 2110, 2120; GEOG 1301, 1401, 3430, 4304, 4306, 4313, 4316, 4324, 4325, 4431; HIST 4871; JOUR 1700, 4700, 4712; POLS 1100, 1301, 1501, 3213, 3216, 3506; PSYC 1101, 1102, 3510; SOCI 1111, 2100, CSED/SOCI 2101, SOCI 3112, 3401, 3432, 3701, 3831, 3860, 4442, 4631, 4923; UNIV 2304; WMST 2100.

*To qualify for the Bachelor of Arts degree,* the student must complete a minimum of 124 semester hours with a grade point average of 2.0. Of the 124 semester hours required, not more than 42 semester hours in any one subject will be counted toward a degree. A minimum of 42 semester hours must be in courses from the upper division.

### C. The Major (42 hours)

Completion of 36 semester hours in art history courses, including ARTH 2101, 2102, 4195, and one upper division course each from five of the following art history categories: Ancient, Medieval, Renaissance, Baroque, Modern European, American, and non-European art, plus 12 hours upper division ARTH electives. A minimum of 6 hours in studio art is also required.

### D. Electives (20 - 24 hours)

Completion of courses to bring the total number of hours to 124 semester hours.

### E. Computer Literacy

This requirement my be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing a university-approved computer literacy examination.

## Typical 4-Year Art History Sequence

| | | | |
|---|---|---|---|
| | **Freshman Year** | | |
| ARTH 2101 | 3 | ARTH 2102 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Foreign Language (or elective)** | 3 | Foreign Language (or elective)** | 3 |
| Fine Arts Heritage* | 3 | Studio elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| | **Sophomore Year** | | |
| ARTH elective | 3 | ARTH elective | 3 |
| ARTH elective | 3 | ARTH elective | 3 |
| Foreign Language/ B.A. | 3 | Foreign Language/ B.A. | 3 |
| MATH* | 3 | MATH* | 3 |
| Literary Heritage* | 3 | American Heritage* | 3 |
| COMM 2381 | 3 | | |
| Semester Totals | 18 hrs | | 15 hrs |

| | | | |
|---|---|---|---|
| **Junior Year** | | | |
| ARTH elective | 3 | ARTH elective [W] | 3 |
| Computer Literacy | 3-4 | ARTH elective [C] | 3 |
| Social Science* | 3 | Social Science* | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 15-16 hrs | | 15 hrs |
| **Senior Year** | | | |
| ARTH elective | 3 | ARTH 4195 [I] | 3 |
| ARTH elective | 3 | Social Science/B.A. | 3 |
| Nat. Sci./Math/B.A. | 3-4 | Humanities/B.A. | 3 |
| Upper division elective | 3 | Upper division elective | 3 |
| Studio elective | 3 | Elective | 3 |
| American Heritage* | 3 | Elective (if needed) | 1 |
| Semester Totals | 15-16 hrs | | 15-16 hrs |

Total Hours: 123-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

**Students presenting a language to meet University admission requirements cannot receive credit for 1010 in that language.

# COMMUNICATION

## Department of Communication

## Communication Major (B.A.)

### A. University General Education Program (48 - 51 hours)

See page 57 for the University General Education Program requirements.

### B. Bachelor of Arts (B.A.) (18-19 hours)

These hours are in addition to the University General Education Program requirements.

Foreign Language: 6 hours in a single foreign language at or above the 2000 level or equivalent.

1. If the language chosen was used to meet University admissions requirements, students must take the foreign language placement exam (if they have not already successfully completed a language course at an accredited institution of higher education). For information about the dates and place of placement exams, contact the Department of Foreign Languages and Literatures. On the basis of the results of the placement exam, students should follow these guidelines:
   If placed into 1010: complete 1010, 1020, 2010, 2020
   If placed into 1020: complete 1020, 2010, 2020
   If placed into 2010: complete 2010, 2020
   If placed into 2020: complete 2020
   If placed into 3301 or higher: language requirement fulfilled
   Or complete 6 hours at the 2000 level or above of another language
2. Students presenting a language to meet University admission requirements cannot receive credit for 1010 in that language.
3. No credit hours are immediately granted on the basis of the placement exam.
4. Satisfactory completion of the language requirement by means of the placement exam will be noted on the student's transcript.
5. Students whose first college-level language course is 2010 or higher and who pass this course with a minimum grade of "C" may apply for Credit by Course Placement. The applicable fees are listed in the Miscellaneous Fees section of this *Bulletin*. Students wishing such credit must make written application to the chair of the Department of Foreign Languages and Literatures. Credit by Course Placement shall apply only to the lower division, and credit gained in this manner shall not exceed 12 semester hours in any one language. For additional information, see Credit by Course Placement in Section 5 of this *Bulletin*.
6. Once a student begins with a lower-division course, all remaining higher-numbered courses in the lower division must be taken in sequence, without skipping. For example, students who begin with LATN 1010 cannot skip LATN 1020 and enroll in LATN 2010.
7. For students whose mother tongue is not English, lower-division credit in the native language will be awarded when the student has successfully completed the English composition requirement for graduation and has proven proficiency in the native language to the satisfaction of the Department of Foreign Languages and Literatures. The student must make written application to the chair of the Department of Foreign Languages and Literatures.

*Humanities:* 3 hours of upper-division coursework, in an area outside of the major, to be chosen from one of the following categories. Please note that some courses have prerequisites:

1. Any upper-division literature course in CHIN, CLAS, ENGL, FREN, GERM, GREK, ITAL, JAPN, LALI, LATN, RUSS, or SPAN. Students should consult with their advisor or with the department to determine the appropriated courses.
2. Any upper-division HIST course, **except** HIST 2030, 3045, 3300, 3863, 4020, 4022, 4851, 4871, 4881, 4998, 4999.
3. Any upper-division PHIL course.
4. Judaic Studies: JDST 3201, 3202, 3661, 3801, 3802, 4671.
5. Political Thought: POLS 3102, 3401, 3402, 4405, 4415, 4416.
6. THEA 4852

*Fine Arts Heritage:* 3 hours (in a different subject area than University General Education Program requirement) from: ART 1030, ARTH 2101, COMM 1851, COMM 4850, COMM 4858, DANC 1151, DANC 3101, MUS 1030, MUHL 4800, THEA 1030, THEA 4551, THEA 4552.

*Mathematics/Natural Sciences:* 3-4 hours of Mathematics or Natural Sciences, in an area outside of the major.

1. Mathematics: one MATH course (in a different subject area than University General Education Program requirements), or PHIL 1611.
2. Natural Sciences: 3-4 hours (different from the University General Education Program science), selected from: BIOL/MMCS 1010/1011, BIOL 1020/1021; BIOL/MMCS 1110/1111, BIOL 1120/1121; CHEM 1010/1011, 10201021; CHEM 1110/1111, 1120/1121; GEOG 1003, 1010/1011, 1020/1021, 3221, 4120, 4122, 4201, 4211, 4231, 4241; GEOL 1040/1050, 1103, 3802; PHYS 1010/1001, 1020/1002; PHYS 2010/2011, 2020/2021, 2110/2111, 2120/ 2121; PSYC 3306 (if University General Education Program sequence is not biology); UNHP 3407; UNIV 1610, 1611. NOTE: If a course has a lab, the lab must also be taken to complete this requirement.

*Social Science:* 3 hours of a Social Science (in addition to University General Education Program requirements) in an area outside of the major. No more than two courses from one discipline may be used to fulfill the University General Education Program and B.A. Social Science requirements. Coursework to be chosen from: AAAS 2100, ANTH 1100, 1200; CJUS 1100, 2110, 3510; COMM 1780, 4375; ECON 2110, 2120; GEOG 1301, 1401, 3430, 4304, 4306, 4313, 4316, 4324, 4325, 4431; HIST 4871; JOUR 1700, 4700, 4712; POLS 1100, 1301, 1501, 3213, 3216, 3506; PSYC 1101, 1102, 3510; SOCI 1111, 2100, CSED/SOCI 2101, SOCI 3112, 3401, 3432, 3701, 3831, 3860, 4442, 4631, 4923; UNIV 2304; WMST 2100.

*To qualify for the Bachelor of Arts degree,* the student must complete a minimum of 124 semester hours with a grade point average of 2.0. Of the 124 semester hours required, not more than 42 semester hours in any one subject will be counted toward a degree. A minimum of 42 semester hours must be in courses from the upper division.

### C. The Major

1. *Major Core (9 hours)*
   All students must take COMM 1780, 2381 (included in the University General Education Program), and one of: COMM 3861, 4360, or 4850, a 2.0 cumulative GPA is required for all courses completed in the major. In addition, all students must fulfill the requirements for one of the following concentrations:
2. *Concentrations (24-28 hours):*
   a. *Broadcast and Electronic Media (27-28 hours):* COMM 3800; 4857; three of: COMM 4810, 4811, 4812, 4831, or 4871; two of: COMM 3321, 3322, 3330, 3371, 4011, 4013, or 4854; one of: COMM 3820, 3821, or 3823; and three additional hours in Communication.
   b. *Communication (27 hours):* COMM 3321, 3322, 3330, 4381; and 15 additional hours in Communication.
   c. *Film and Video Production (24-25 hours):* COMM 3823; 3824; 3842; three of 4822, 4824; 4825, 4841, 4842, 4891, 4960, or 4970; one of: (selection may not include course used to satisfy core) COMM 3861, 4220-29, 4850, 4851, 4853, 4854, 4856, 4857, or 4858.

### D. Electives (2 - 20 hours)

Completion of courses to bring the total to 124 semester hours.

### E. Computer Literacy

This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing a University-approved computer literacy examination.

### F. Honors Program

To be eligible for admission to the Communication Honors program a student must meet the following requirements: (1) declare a major in Communication, (2) have completed 12 hours of Communication coursework, (3) have Department of Communication faculty member as an adviser, and (4) make an honors application to the adviser. Applications may be obtained from the director of the honors program or from the department office.

To be awarded departmental honors at graduation with the designation "With Honors in Communication," a student must fulfill the following requirements: (1) maintain a 3.5 GPA in communication coursework, (2)

maintain a 3.5 GPA overall, (3) complete all Department of Communication major requirements, (4) complete an independent thesis or an independent film/video project sponsored by a Department of Communication faculty member consisting of six hours over two semesters: three hours in research preparation (COMM 3330, 4381, or 4891), and three hours in completing the thesis project (COMM 4999), and (5) successful defense of the thesis.

## Communication Minor

Any student wishing to minor in any area in the Department of Communication should see the department chair who will assign an appropriate advisor. The minor must consist of at least 18 hours of approved coursework, 9 of which must be upper division. Coursework for all minors will be determined by the student in conference with the advisor with the approval of the department chair.

## Typical 4-Year Communication Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| COMM 1780 | 3 | COMM 2381 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Hist/Phil Heritage * | 3 | Hist/Phil Heritage* | 3 |
| Foreign Language/ B.A. (or elective)** | 3 | Foreign Language/ B.A. (or elective) | 3 |
| Fine Arts Heritage* | 3 | COMM conc. elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| **Sophomore Year** | | | |
| COMM conc. elective | 3 | COMM conc. elective | 3 |
| COMM conc. elective | 3 | COMM conc. elective | 3 |
| Foreign Language/ B.A. | 3 | Foreign Language/ B.A. | 3 |
| MATH* | 3 | MATH* | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| Literary Heritage* | 3 | | |
| Semester Totals | 18 hrs | | 15 hrs |
| **Junior Year** | | | |
| COMM conc. elective | 3 | COMM conc. elective | 3 |
| Computer Literacy | 3-4 | COMM conc. elective | 3 |
| Social Science* | 3 | Social Science* | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 15-16 hrs | | 15 hrs |
| **Senior Year** | | | |
| COMM conc. elective | 3 | COMM conc. elective | 3 |
| Fine Arts Heritage/B.A. | 3 | Social Science/B.A. | 3 |
| Nat. Sci./Math/B.A. | 3-4 | Humanities/B.A. | 3 |
| Upper division elective | 3 | Upper division elective | 3 |
| Elective | 3 | Elective | 3 |
| | | Elective (if needed) | 1 |
| Semester Totals | 15-16 hrs | | 15-16 |

Total Hours: 123-126

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

**Students presenting a language to meet University admission requirements cannot receive credit for 1010 in that language.

# JOURNALISM

## Department of Journalism

The Journalism major at The University of Memphis offers preparation for careers in advertising, broadcast journalism, internet journalism, print journalism, and public relations. The journalism student is required to take career-oriented skills courses to enhance writing, editing, and graphic abilities, as well as theory courses to broaden the student's philosophical understanding.

Journalism graduates Typically work as newspaper or television reporters and photographers, editors and anchors, advertising executives, public relations professionals, and freelance writers and producers. No matter which concentration is selected, each student journalist requires a strong background in liberal arts and an understanding of the social sciences to augment his or her professional skills. Consequently, no more than 42 hours of journalism courses may be included in the 124 hours required for graduation. The remainder of the student's course work must follow the guidelines provided by the University to qualify for a Bachelor of Arts degree.

Practical experience is available on The Helmsman newspaper, radio station WUMR, and campus TV newscast productions. Additionally, Journalism students may participate in one of the following activities: University Public Information Office, Athletic Publicity Office, Alumni Publicity Office. Qualified majors will be chosen for senior-year internships with Memphis newspapers, magazines, advertising and public relations agencies, and broadcasting stations.

**NOTE:** Sophomore standing or permission of instructor required for courses at the 2000 level and above. JOUR 2121, which requires typing proficiency, is a prerequisite for journalism majors taking more advanced writing courses in the program. Students must pass the Journalism Department's Writing Proficiency Exam before enrolling for JOUR 2121. This test is offered several times during the year. Prerequisite journalism courses, including JOUR 2121, must be completed with a minimum grade of "C" (2.0) before advancing to any course in the program to which the prerequisites are applied.

Students majoring in journalism may select only one concentration. Of the 124 hours required for graduation, 82 hours must be other than journalism or journalism skills related courses. Of these 82 hours, at least 65 hours must be in liberal arts. Twelve semester hours in a secondary area of emphasis, outside the Department of Journalism, approved by the student's advisor, is recommended.

In order to be in compliance with the Accrediting Council on Education in Journalism and Mass Communication accreditation standards, The University of Memphis will accept no more than 12 semester hours or the equivalent in journalism courses for transfer from community colleges to be applied toward the degree.

## Journalism Major (B.A.)

### A. University General Education Program (48 - 51 hours)

See page 57 for the University General Education Program requirements.

### B. Bachelor of Arts (B.A.) (18-19 hours)

These hours are in addition to the University General Education Program requirements.

*Foreign Language:* 6 hours in a single foreign language at or above the 2000 level or equivalent.

1. If the language chosen was used to meet University admissions requirements, students must take the foreign language placement exam (if they have not already successfully completed a language course at an accredited institution of higher education). For information about the dates and place of placement exams, contact the Department of Foreign Languages and Literatures. On the basis of the results of the placement exam, students should follow these guidelines:
   If placed into 1010: complete 1010, 1020, 2010, 2020
   If placed into 1020: complete 1020, 2010, 2020
   If placed into 2010: complete 2010, 2020
   If placed into 2020: complete 2020

If placed into 3301 or higher: language requirement fulfilled
Or complete 6 hours at the 2000 level or above of another language

2. Students presenting a language to meet University admission requirements cannot receive credit for 1010 in that language.
3. No credit hours are immediately granted on the basis of the placement exam.
4. Satisfactory completion of the language requirement by means of the placement exam will be noted on the student's transcript.
5. Students whose first college-level language course is 2010 or higher and who pass this course with a minimum grade of "C" may apply for Credit by Course Placement. The applicable fees are listed in the Miscellaneous Fees section of this *Bulletin*. Students wishing such credit must make written application to the chair of the Department of Foreign Languages and Literatures. Credit by Course Placement shall apply only to the lower division, and credit gained in this manner shall not exceed 12 semester hours in any one language. For additional information, see Credit by Course Placement in Section 5 of this *Bulletin*.
6. Once a student begins with a lower-division course, all remaining higher-numbered courses in the lower division must be taken in sequence, without skipping. For example, students who begin with LATN 1010 cannot skip LATN 1020 and enroll in LATN 2010.
7. For students whose mother tongue is not English, lower-division credit in the native language will be awarded when the student has successfully completed the English composition requirement for graduation and has proven proficiency in the native language to the satisfaction of the Department of Foreign Languages and Literatures. The student must make written application to the chair of the Department of Foreign Languages and Literatures.

*Humanities:* 3 hours of upper-division coursework, in an area outside of the major, to be chosen from one of the following categories. Please note that some courses have prerequisites:

1. Any upper-division literature course in CHIN, CLAS, ENGL, FREN, GERM, GREK, ITAL, JAPN, LALI, LATN, RUSS, or SPAN. Students should consult with their advisor or with the department to determine the appropriated courses.
2. Any upper-division HIST course, except HIST 2030, 3045, 3300, 3863, 4020, 4022, 4851, 4871, 4881, 4998, 4999.
3. Any upper-division PHIL course.
4. Judaic Studies: JDST 3201, 3202, 3661, 3801, 3802, 4671.
5. Political Thought: POLS 3102, 3401, 3402, 4405, 4415, 4416.
6. THEA 4852

*Fine Arts Heritage:* 3 hours (in a different subject area than University General Education Program requirement) from: ART 1030, ARTH 2101, COMM 1851, COMM 4850, COMM 4858, DANC 1151, DANC 3101, MUS 1030, MUHL 4800, THEA 1030, THEA 4551, THEA 4552.

*Mathematics/Natural Sciences:* 3-4 hours of Mathematics or Natural Sciences, in an area outside of the major.

1. Mathematics: one MATH course (in a different subject area than University General Education Program requirements), or PHIL 1611.
2. Natural Sciences: 3-4 hours (different from the University General Education Program science), selected from: BIOL/MMCS 1010/1011, BIOL 1020/1021; BIOL/MMCS 1110/1111, BIOL 1120/1121; CHEM 1010/1011, 1020/1021; CHEM 1110/1111, 1120/1121; GEOG 1003, 1010/1011, 1020/1021, 3221, 4120, 4122, 4201, 4211, 4231, 4241; GEOL 1040/1050, 1103, 3802; PHYS 1010/1001, 1020/1002; PHYS 2010/2011, 2020/2021, 2110/2111, 2120/ 2121; PSYC 3306 (if University General Education Program sequence is not biology); UNHP 3407; UNIV 1610, 1611. NOTE: If a course has a lab, the lab must also be taken to complete this requirement.

*Social Science:* 3 hours of a Social Science (in addition to University General Education Program requirements) in an area outside of the major. No more than two courses from one discipline may be used to fulfill the University General Education Program and B.A. Social Science requirements. Coursework to be chosen from: AAAS 2100, ANTH 1100, 1200; CJUS 1100, 2110, 3510; COMM 1780, 4375; ECON 2110, 2120; GEOG 1301, 1401, 3430, 4304, 4306, 4313, 4316, 4324, 4325, 4431; HIST 4871; JOUR 1700, 4700, 4712; POLS 1100, 1301, 1501, 3213, 3216, 3506; PSYC 1101, 1102, 3510; SOCI 1111, 2100, CSED/SOCI 2101, SOCI 3112, 3401, 3432, 3701, 3831, 3860, 4442, 4631, 4923; UNIV 2304; WMST 2100.

*To qualify for the Bachelor of Arts degree,* the student must complete a minimum of 124 semester hours with a grade point average of 2.0. Of the 124 semester hours required, not more than 42 semester hours in any one subject will be counted toward a degree. A minimum of 42 semester hours must be in courses from the upper division.

### C. The Major (36 - 54 hours)

1. *Major Core (12 - 15 hours)*
   Completion of JOUR 1700, 2121, and 4700. Advertising, Broadcast News, Internet Journalism, and Public Relations students will take one of the following: JOUR 4702, 4708, 4712, or 4716. News Editorial students will take two of the following: JOUR 3700, 4702, 4708, 4712 or 4716.
2. *Concentrations (21 - 39 hours)*
   a. *Advertising (30 hours):* JOUR 3300, 3324, 3345, 3900, 4327, 4328, 4900; JOUR 3400 or 4330 or COMM 3801; MKTG 3010.
   b. *Broadcast News (22 hours):* JOUR 3120, 3625, 4500, 4629, 4639, 4655; COMM 3801.
   c. *Internet Journalism (27 hours):* JOUR 3526, 3900, 4124, 4500, 4550, 4900; three of the following: JOUR 3120, 3130, 3324, 3421, 3625, 4120, 4130, 4328, 4440.
   d. *Newspaper\Magazine (21 hours):* JOUR 2123, 3120, 3130, 3526, 4120, 4124, 4140.
   e. *Public Relations (36 hours):* JOUR 3400, 3421, 3900, 4420, 4440; MGMT 3110; MKTG 3010; one course from among: JOUR 3120, 3130, 3625; and one course from among: JOUR 3300, 4430, 4500 or COMM 3801.

### D. Electives (3 - 24 hours)

Completion of courses to bring the total to 124 semester hours.

### E. Computer Literacy

This requirement is may be satisfied by taking JOUR 2121 or JOUR 3900.

## Journalism Minor

Any student wishing to minor in any area in the department of Journalism should see the department chair who will assign an appropriate advisor. The minor must consist of at least 18 hours of approved coursework, 9 of which must be upper division. Coursework for all minors will be determined by the student in conference with the advisor with the approval of the department chair.

## Typical 4-Year Journalism Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| American Heritage* | 3 | COMM 2381 | 3 |
| JOUR 1700 | 3 | JOUR 2121 | 3 |
| Foreign Language/B.A. | 3 | Hist/Phil Heritage* | 3 |
| Social Science* | 3 | Social Science/B.A | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| **Sophomore Year** | | | |
| Hist/Phil Heritage* | 3 | JOUR core elective | 3 |
| Natural Science* | 4 | American Heritage* | 3 |
| Social Science* | 3 | Natural Science* | 4 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Literary Heritage* | 3 | MATH | 3 |
| MATH | 3 | | |
| Semester Totals | 19 hrs | | 16 hrs |
| **Junior Year** | | | |
| Nat. Sci./Math/B.A. | 3 | JOUR conc. elective | 3 |
| JOUR conc. elective | 3 | JOUR conc. elective | 3 |
| Elective [C] | 3 | HMSE 1100 | 2 |
| Jour conc. elective | 3 | Fine Arts Heritage/B.A. | 3 |
| Fine Arts Heritage* | 3 | Elective [W] | 3 |
| Semester Totals | 15 hrs | | 14 hrs |
| **Senior Year** | | | |
| Jour conc. elective | 3 | Jour conc. elective | 3 |
| JOUR 4700 | 3 | PHED* | 2 |
| Jour conc. elective | 3 | Elective [I] | 3 |
| Humanities/B.A. | 3 | Jour conc. elective | 3 |
| Jour conc. elective | 3 | Jour core elective | 3 |
| Semester Totals | 15 hrs | | 14 hrs |

Total Hours: 123. Internship elective highly recommended last semester to enhance employability and complete minimum of 124 hours for degree

Total Hours Required for Graduation: 124

*Must satisfy University General Education Program Requirement

# MUSIC

## Rudi E. Scheidt School of Music

The Bachelor of Music with a major in Music is a professional degree, the requirements for which provide the student with an opportunity for specialization in the traditional disciplines of music and music education. A minimum grade of "C" is required in every graded course applicable toward the major. The student must maintain an overall grade point average of 2.0. Exception: School Music concentration: (1) overall grade point average of 2.25; (2) minimum of grade point average 2.25 in all courses taken at The University of Memphis excluding all credit transferred from other institutions; (3) minimum grade point average of 2.5 in all music courses; (4) minimum grade point average of 2.5 in all required professional education courses; (5) minimum grade of "C" in each professional education and music course. The specific degree requirements are divided into four groups: (1) University General Education Program, (2) basic music courses, (3) courses required for the specific emphasis chosen by the student, (4) electives to bring the total of semester hours taken to a minimum of 130 (134 for school music concentration). All students must complete a minimum of 42 hours at the upper division level. Transfer students must complete a minimum of 30 semester hours of music and/or music education courses at the upper division level at The University of Memphis.

**Admission:** All applicants seeking admission as freshman music majors or as transfer students must complete and submit to the Admissions Office of The University of Memphis an appropriate formal application form. In addition to academic considerations, admission to the music degree program requires a personal interview and an audition. The audition consists of (1) performance in the student's major applied area, (2) a music theory examination and (3) a piano placement exam. Candidates are accepted on the basis of accomplishment, potential and suitability for the concentration they wish to pursue. Students seeking admittance as music majors in the fall term should apply no later than August 1, and those seeking admittance in the spring term should apply no later than December 1. Additional information on specific audition requirements and on interview/audition appointments may be obtained through the office of the School of Music or at *http://music.memphis.edu/.*

## Music Major (B.M.)

### A. University General Education Program (42 - 45 hours)

See page 57 for the University General Education Program requirements. The *Fine Arts Heritage* category is satisfied for students who meet all B.M. requirements. Three hours of Social Science is required in either the *Global* or *non-Global* category for all students except those in the School Music concentration. These students must take one *Global* course (3 hours) and PSYC 1200.

### B. The Major (74.5 - 102 hours)

1. *Major Core (40 - 43 hours)*
   a. Completion of MUTC 1008, 1010, 1009, 1011, 2008, 2010, 3008, 3009 (16 hours)
   b. Theory elective (one from the following): MUTC 3101, 3201, 3202, 4205, 4206, 4207; Jazz majors take MUTC 2103 (3 hours)
   c. MUHL 3301, 3302; Jazz majors take MUHL 3303, 4806 (6 hours)
   d. History Elective (choose one from the following): MUHL 4008, 4009, 4010, 4013 (Music Education and Jazz concentrations are exempt) (3 hours);
   e. MUSE 3700 (2 hours);
   f. MUAP 1105, 1106, 2107, 2108* (MUAP 2108 is not required of Music Education instrumental or Jazz majors. Jazz majors take MUAP 1116) (3-4 hours);
   * Piano Proficiency: All undergraduate Music Majors must take a piano placement examination before enrolling in applied music courses. This evaluation will place students in the appropriate piano class (MUAP 1105, 1106, 2107, 2108). Completing MUAP 2108 (MUAP 2107 for Music Education instrumental and jazz /studio performance majors) will satisfy the Piano Proficiency requirement. Students proficient in piano may satisfy the Piano Proficiency requirements by passing MUSE 3101 or by passing the Piano Proficiency Exam in lieu of course work. For Music Education students, the piano proficiency requirements must be met before student teaching is taken. Since requirements vary according to the area of concentration, check with the Coordinator of Class Piano Instruction for specific details. All Jazz concentration students must satisfy jazz piano proficiency prior to graduation.
   g. MUID 1001 (1)
   h. Ensemble Requirement: All Music majors must take a minimum of eight (8) semesters of ensemble. The specific requirements for this are determined by each division and degree program. Please consult with your adviser for the specific outline for your applied area and degree program exceptions.
   i. Concert Attendance: All Music majors are required to attend a minimum of 100 concerts or recitals in the four-year program (suggested 25 per year). Records will be maintained in by the School of Music on the number of events attended by each student and an annual report will be filed with the Director.
2. *Concentration (37 - 62 hours)*
   a. *Jazz and Studio Performance (58 hours)*
      MUAP 1xx1, (4), 1xx2 (12), 3012-14 (8), 3103 (6), 4xx2 (4), 4895, MUID 2201 (2), 3802, MUSE 4210, MUTC 3201, 3825, 3826, 3827, 3828
   b. *Jazz and Studio Composition/Arranging (61 hours)*
      MUAP 1312, (pianists take 1101) (4), MUID 2201 (2), 3802, MUTC 2501, 2503 (2), 2504 (2), 2511 (2), 3201, 3501 (2), 3825, 3828 (2), 4106, 4503, 4504, 4896 (4), MUAP 1xx2 (7), 3012-14 (6), 3103 (2).
      Select two from the following (minimum 5 hours): MUSE 4210 (2), MUTC 3826 (3), MUTC 4206 (3), MUID 3801 (3).
   c. *Performance (45-60 hours)*
      Instruction in performance leading to the Bachelor of Music in Music with a concentration in Performance is provided for the following areas: Trumpet, Horn, Trombone, Tuba, and Euphonium (Brass Instruments); Piano, Harpsichord, and Organ (Keyboard Instruments); Percussion; Violin, Viola, Violoncello, Bass, Guitar, and Harp (String Instruments), Flute, Oboe, Clarinet, Saxophone, and Bassoon (Woodwind Instruments); and Voice.
      Individual instruction in major performance area (26 hours)
      Instruction in secondary performance area, repertory, and/or pedagogy: (6 hours)
      *For Brass Instruments:* MUHL 4020 (3) Solo Brass Literature; MUSE 4514 (3) Brass Pedagogy.
      *For Woodwind Instruments:* 2-4 hours in secondary woodwind instrument(s); 2-4 hours from MUAP 2201, 4263.
      *For Percussion:* 3 hours Percussion Pedagogy; 3 hours Percussion Repertory.
      *For String Instruments:* 3 hours MUHL 4500; 1 hour appropriate secondary string instrument (violin take viola; viola take violin; cello take bass; bass take jazz bass); 2 hours MUAP 4004.
      *For Guitar, and Voice:* 6 hours in appropriate courses in repertory, pedagogy, and vocal diction.
      *For Piano Performance students:* MUHL 4001 (2), MUSE 4501 (2), and MUSE 4505 (2).
      Junior Recital (1 hour)
      MUAP 4999. Artist Recital (4 hours)
      Small Ensembles (4-6 hours)
      Four semesters of small ensembles, chosen from those listed under "Small Ensembles and Chamber Music" in consultation with the major advisor, is required. Piano (and Harpsichord) performance students must take a minimum of four (4) semesters of MUAP 3301, Chamber Music for Keyboard, as part of the music core requirements for ensembles.
      For students in voice, 6 hours in one of the following languages that must be different from admission requirement language: French, German, or Italian.
      For Piano and Harpsichord performance students, the following is to be taken in lieu of the four hours of class piano: Functional Keyboard Skills (1), secondary keyboard instrument (two semesters of one credit each) (2), and one music elective. (1).
   d. *Sacred Music: (39-45 hours).*
      Individual Instruction in Voice or Organ (14)
      MUSA 4104, 4105 Sacred Music in History and Practice I & I I (6)
      MUSE 4701 Choral Conducting (2)
      MUSA 4106 Children's Choirs in the Church (3)
      MUAP 4999. Artist Recital (4)
      For students in Voice:
      MUSE 4211 Vocal Diction (2)
      Small Ensembles (4)
      Music Electives (3)
      For students in Organ:
      Individual Instruction in Voice (4)
      MUSA 4107 Service Playing for Organists (3)
      MUHL 4005 History and Literature of the Organ (3)
      Small Ensembles (2)
      Music Electives (4)

e. *Composition: (52 hours)*
Individual instruction in applied music to include two semesters of piano (8 hours)
MUTC 2501 Composition (3)
MUTC 2502 Composition minimum two semesters (6)
MUTC 4501 Composition (minimum three semesters)(9)
MUTC 4511 Intermediate Electronic Music (2)
MUTC 4512 Advanced Electronic Music (2)
MUTC 4205 Sixteenth Century Counterpoint (3)
MUTC 4206 Eighteenth Century Counterpoint (3)
MUTC 4209 Advanced Orchestration (3)
MUTC 4102 Compositional Processes of the 20th Century (3)
MUSE 3702 Score Reading (3)
MUHL 4406 Twentieth Century Music (3)
MUTC 4599 Senior Composition Recital (4)

f. *Music History: (45 hours)*
Individual instruction in applied music (10)
MUHL 4259 Studies in Bibliography (3)
Concentration electives chosen in consultation with major advisor (11)
Advanced Music History (12)
Foreign Language: 6 semester hours in addition to requirements for admission (6)
MUHL 4999: Senior Project in Music History (3)

g. *School Music: (50-52 hours)*
Core: (29 hours)
MUSE 1101 Class Instruction in Brass Instruments (1)
MUSE 1103 Class Instruction in Percussion Methods (1)
MUSE 1104 Class Instruction in Woodwind Instruments (1)
MUSE 1116 Class Instruction in Stringed Instruments (1)
EDPR 2111 Development Across the Life Span (3)
MUSE 2002 Foundations of Music Education (3)
MUSE 2100 Music Education Performance Lab (1)
SPED 2000 Intro to Exceptional Learners (3)
MUSE 4999 Seminar in Music Education (3)
MUSE 4911 Student Teaching in Music (9)
MUSE 4213 Materials and Methods of General Music (3)
Instrumental Emphasis: (24 hours)
MUSE 1112 Class Instruction in Voice (1)
MUSE 4700 Instrumental Conducting (2)
MUSE 4205 Marching Band Techniques (2) (not required for String majors)
Muse 4210 Jazz Ensemble Techniques (2)
Applied Music: at least 2 hours at the upper division level (14)
MUSE 4303 Materials and Methods of Instrumental Music, 6-12 (3)
Choral Emphasis: (22-23 hours)
MUSE 1112 Class Instruction in Voice (1)
(Not required of students enrolled in applied voice)
MUSE 1119 Guitar for the Classroom Teacher (1)
MUSE 4211 Vocal Diction I (2)
MUSE 4701 Choral Conducting (2)
Applied Music: at least 2 hours at the upper division level (14)
MUSE 4405 Materials and Methods of Choral Music, (7-12) (3)

### C. Electives (0 - 12 hours)

Completion of elective courses to bring the total to a minimum of 130 semester hours (134 for students in the School Music concentration). Courses will be chosen by the student in consultation with the advisor and major professor.

### D. Computer Literacy

This requirement is fulfilled by taking MUID 1001 (1), a course of study approved by the dean, or by passing an approved computer literacy examination. Students in the School Music concentration will fulfill the requirement by taking MUID 1001 (1), MUSE 4213.

## Music Minor

Any student wishing to minor in Music must first perform an audition and be accepted as a minor by the School of Music. Once accepted, contact the Associate Director for Undergraduate Studies in the School of Music who will assign an advisor. The minor in Music consists of 21 hours from the following: 4 hours Applied Music individual instruction; 2 semester appropriate ensembles; MUTC 1008 and 1009; 3 hours from MUHL 3301, 3302, or 3303; 6 hours electives in music; 25 concert/recital attendance requirement.

## Typical 4-Year Vocal Performance Concentration Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science * | 4 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 3 | MUAP (applied music) | 3 |
| MUAP (large ensemble) | 1 | MUAP (large ensemble) | 1 |
| Semester Totals | 16 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| Literary Heritage* | 3 | PHED* | 2 |
| MUTC 2008 | 3 | MATH* | 3 |
| MUTC 2010 | 1 | American Heritage* | 3 |
| MUAP (applied music) | 3 | MUTC 3008 | 3 |
| MUAP 2107 | 1 | MUTC 3009 | 1 |
| MUAP (ensemble) | 1 | MUAP 2108 | 1 |
| MUAP (ensemble) | 1 | MUAP (applied music) | 3 |
| HMSE 1100 | 2 | MUAP (ensemble) | 1 |
| American Heritage* | 3 | | |
| Semester Totals | 18 hrs | | 17 hrs |
| **Junior Year** | | | |
| MUID 1001 | 1 | Hist/Phil Heritage* | 3 |
| Hist/Phil Heritage* | 3 | Foreign Language | 3 |
| MUHL 3301 | 3 | MUHL 3302 | 3 |
| Foreign Language | 3 | MUAP (applied music) | 4 |
| COMM 2381 | 3 | MUAP (ensemble) | 1 |
| MUAP (applied music) | 4 | MUAP 3999 | 1 |
| MUAP (ensemble) | 1 | MUAP (ensemble) | 1 |
| Semester Totals | 18 hrs | | 16 hrs |
| **Senior Year** | | | |
| Theory elective** | 3 | MUAP 4999 | 4 |
| MUSE 4211 | 2 | MUHL elective**** | 3 |
| Social Science* | 3 | MUHL 4002 or 4003 | 3 |
| MUSE 3700 | 2 | MUSE 4212 | 2 |
| MUAP (applied music) | 4 | MUAP (ensemble) | 1 |
| MUAP (ensemble) | 1 | MUAP (ensemble) | 1 |
| MUAP (ensemble) | 1 | | |
| Semester Totals | 16 hrs | | 14 hrs |

Total Hours: 131

Total Hours Required for Graduation: 131

*Must satisfy University General Education Program Requirement

**Choose one from MUTC 3101, 3201, 3202, 4205, 4206, 4207

***Choose one from MUHL 4008, 4009, 4010, 4013

## Typical 4-Year Jazz and Studio Performance Concentration Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science * | 4 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 2 | MUAP (applied music) | 2 |
| MUAP 3012/4 | 1 | American Heritage* | 3 |
| HMSE 1100 | 2 | MUAP 1116 | 1 |
| | | MUAP 3012/4 | 1 |
| Semester Totals | 17 hrs | | 19 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| Literary Heritage* | 3 | Social Science* | 3 |
| MUTC 2008 | 3 | American Heritage* | 3 |
| MUTC 2010 | 1 | MUAP (2nd instrument) | 2 |
| MUAP (applied music) | 2 | MUTC 3008 | 3 |
| MUTC 3825 | 3 | MUTC 3009 | 1 |
| MUTC 2103 | 3 | MUTC 3201 | 3 |
| MUAP 3012/4 | 1 | MUAP (applied music) | 2 |
| MUAP 3103 | 1 | MUAP 3012/4 | 1 |
| MUAP (2nd instrument) | 2 | MUAP 3013 | 1 |
| Semester Totals | 19 hrs | | 19 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| MUID 2201 | 2 | Hist/Phil Heritage* | 3 |
| MUSE 3700 | 2 | MATH* | 3 |
| MUAP 3103 | 1 | MUHL 3303 | 3 |
| MUTC 3826 | 3 | MUAP (applied music) | 2 |
| COMM 2381 | 3 | MUAP 3012/4 | 1 |
| MUAP (applied music) | 2 | MUTC 3828 | 2 |
| MUAP 3012/4 | 1 | MUID 3802 | 3 |
| MUSE 2107 | 1 | MUAP 3103 | 1 |
| Semester Totals | 15 hrs | | 18 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| MUID 3827 | 3 | Hist/Phil Heritage* | 3 |
| MUSE 4210 | 2 | MUAP 4895 | 3 |
| MUID 1001 | 1 | MUHL 4806 | 3 |
| MUAP 3012/4 | 1 | MUAP 4xx2 | 2 |
| MUAP 4xx2 | 2 | MUAP 3012/4 | 1 |
| MUAP 3103 | 1 | MUAP 3103 | 1 |
| MUAP (2nd instrument) | 2 | PHED* | 2 |
| Semester Totals | 12 hrs | | 15 hrs |

Total Hours: 134

Total Hours Required for Graduation: 131

*Must satisfy University General Education Program Requirement

## Typical 4-Year Jazz Composition and Arranging Concentration Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science * | 4 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 2 | MUAP (applied music) | 2 |
| MUAP 3012/4 | 1 | American Heritage* | 3 |
| HMSE 1100 | 2 | MUAP 1116 | 1 |
| | | MUAP 3012/4 | 1 |
| Semester Totals | 17 hrs | | 19 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| Literary Heritage* | 3 | Social Science* | 3 |
| MUTC 2008 | 3 | American Heritage* | 3 |
| MUTC 2010 | 1 | MUAP (2nd instrument) | 2 |
| MUAP (applied music) | 2 | MUTC 3008 | 3 |
| MUTC 3825 | 3 | MUTC 3009 | 1 |
| MUTC 2103 | 3 | MUTC 3201 | 3 |
| MUAP 3012/4 | 1 | MUAP (applied music) | 2 |
| MUAP 3103 | 1 | MUAP 3012/4 | 1 |
| MUAP (2nd instrument) | 2 | MUAP 3013 | 1 |
| Semester Totals | 19 hrs | | 19 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| MUID 2201 | 2 | Hist/Phil Heritage* | 3 |
| MUSE 3700 | 2 | MATH* | 3 |
| MUAP 3103 | 1 | MUHL 3303 | 3 |
| MUTC 3826 | 3 | MUAP (applied music) | 2 |
| COMM 2381 | 3 | MUAP 3012/4 | 1 |
| MUAP (applied music) | 2 | MUTC 3828 | 2 |
| MUAP 3012/4 | 1 | MUID 3802 | 3 |
| MUSE 2107 | 1 | MUAP 3103 | 1 |
| Semester Totals | 15 hrs | | 18 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| MUID 3827 | 3 | Hist/Phil Heritage* | 3 |
| MUSE 4210 | 2 | MUAP 4895 | 3 |
| MUID 1001 | 1 | MUHL 4806 | 3 |
| MUAP 3012/4 | 1 | MUAP 4xx2 | 2 |
| MUAP 4xx2 | 2 | MUAP 3012/4 | 1 |
| MUAP 3103 | 1 | MUAP 3103 | 1 |
| MUAP (2nd instrument) | 2 | PHED* | 2 |
| Semester Totals | 12 hrs | | 15 hrs |

Total Hours: 134

Total Hours Required for Graduation: 131

*Must satisfy University General Education Program Requirement

## Typical 4-Year String Performance Concentration Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science * | 4 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 3 | MUAP (applied music) | 3 |
| MUAP (large ensemble) | 1 | MUAP (large ensemble) | 1 |
| MUID 1001 | 1 | | |
| Semester Totals | 17 hrs | | 16 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| Literary Heritage* | 3 | PHED* | 2 |
| MUTC 2008 | 3 | MATH* | 3 |
| MUTC 2010 | 1 | American Heritage* | 3 |
| MUAP (applied music) | 3 | MUTC 3008 | 3 |
| MUAP 2107 | 1 | MUTC 3009 | 1 |
| American Heritage* | 3 | MUAP 2108 | 1 |
| MUAP (large ensemble) | 1 | MUAP (applied music) | 3 |
| HMSE 1100 | 2 | MUAP (ensemble) | 1 |
| Semester Totals | 17 hrs | | 17 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| Social Science* | 3 | Hist/Phil Heritage* | 3 |
| Hist/Phil Heritage* | 3 | Theory elective** | 3 |
| MUHL 3301 | 3 | MUHL 3302 | 3 |
| MUAP (applied music) | 4 | MUAP (applied music) | 4 |
| MUAP (small ensemble) | 1 | MUAP (large ensemble) | 1 |
| MUAP (2nd instrument) | 1 | MUAP 3999 | 1 |
| MUAP (large ensemble) | 1 | MUAP (ensemble) | 1 |
| Semester Totals | 16 hrs | | 16 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| COMM 2381 | 3 | MUAP 4999 | 4 |
| MUSE 4211 | 2 | MUHL elective*** | 3 |
| MUAP 4004 | 3 | MUHL 4500 | 3 |
| MUSE 3700 | 2 | Upper division elective | 3 |
| MUAP (applied music) | 4 | MUAP (ensemble) | 1 |
| MUAP (ensemble) | 1 | MUAP (ensemble) | 1 |
| MUAP (ensemble) | 1 | | |
| Semester Totals | 16 hrs | | 15 hrs |

Total Hours: 130

Total Hours Required for Graduation: 130

*Must satisfy University General Education Program Requirement

**Choose one from MUTC 3101, 3201, 3202, 4205, 4206, 4207

***Choose one from MUHL 4008, 4009, 4010, 4013

## Typical 4-Year Piano Performance Concentration Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MUID 1001 | 1 | Social Science* | 3 |
| MATH* | 3 | HMSE 1100 | 2 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1311 | 3 | MUAP 1311 | 3 |
| MUAP (large ensemble) | 1 | MUAP (large ensemble) | 1 |
| Semester Totals | 15 hrs | | 16 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| Literary Heritage* | 3 | COMM 2381 | 3 |
| MUTC 2008 | 3 | MUSE 3700 | 2 |
| MUTC 2010 | 1 | American Heritage* | 3 |
| MUAP 1311 | 3 | MUTC 3008 | 3 |
| MUAP (2nd keyboard) | 2 | MUTC 3009 | 1 |
| American Heritage* | 3 | MUSE 3101 | 1 |
| MUHL 4001 | 2 | MUAP 1311 | 3 |
| | | MUAP 3301 | 1 |
| Semester Totals | 17 hrs | | 17 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| Natural Science* | 4 | Natural Science* | 4 |
| Theory elective** | 3 | MUSE 4505 | 2 |
| MUHL 3301 | 3 | MUHL 3302 | 3 |
| MUAP 4311 | 4 | MUAP 4311 | 4 |
| MUAP 3301 | 1 | MUAP 3301 | 1 |
| MUAP (2nd keyboard) | 2 | MUAP 3999 | 1 |
| | | MUAP (large ensemble) | 1 |
| Semester Totals | 17 hrs | | 16 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| MUSE 4501 | 2 | MUSE 4501 | 2 |
| MUHL elective | 3 | MUSE elective**** | 2-3 |
| PHED* | 2 | MUAP 4999 | 4 |
| MUAP 4311 | 4 | MUHL elective*** | 3 |
| MUAP 3301 | 1 | MUTC elective** | 3 |
| MUAP (large ensemble) | 1 | | |
| Music elective | 1 | | |
| Semester Totals | 17 hrs | | 17 hrs |

Total Hours: 132

Total Hours Required for Graduation: 130

*Must satisfy University General Education Program Requirement

**Choose one from MUTC 3101, 3201, 3202, 4205, 4206, 4207

***Choose one from MUHL 4008, 4009, 4010, 4013

****Choose either MUSE 4503 or 4511

## Typical 4-Year Brass Performance Concentration Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science * | 4 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 3 | MUAP (applied music) | 3 |
| MUAP 2002 | 1 | MUAP (large ensemble) | 1 |
| MUID 1001 | 1 | | |
| Semester Totals | 17 hrs | | 16 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| Literary Heritage* | 3 | HMSE 1100* | 2 |
| MUTC 2008 | 3 | MATH* | 3 |
| MUTC 2010 | 1 | American Heritage* | 3 |
| MUAP (applied music) | 3 | MUTC 3008 | 3 |
| MUAP 2107 | 1 | MUTC 3009 | 1 |
| American Heritage* | 3 | MUAP 2108 | 1 |
| MUAP 2002 | 2 | MUAP (applied music) | 3 |
| | | MUAP (ensemble) | 1 |
| Semester Totals | 16 hrs | | 17 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| Social Science* | 3 | Hist/Phil Heritage* | 3 |
| Hist/Phil Heritage* | 3 | Theory elective** | 3 |
| MUHL 3301 | 3 | MUHL 3302 | 3 |
| MUAP (applied music) | 4 | MUAP (applied music) | 4 |
| MUAP (small ensemble) | 1 | MUAP (large ensemble) | 1 |
| MUAP (large ensemble) | 1 | MUAP 3999 | 1 |
| MUSE 4514 | 3 | MUAP (small ensemble) | 1 |
| Semester Totals | 18 hrs | | 16 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| COMM 2381 | 3 | MUAP 4999 | 4 |
| Upper division elective | 3 | MUHL elective*** | 3 |
| Upper division elective | 3 | MUHL 4202 | 3 |
| MUSE 3700 | 2 | Upper division elective | 3 |
| MUAP (applied music) | 4 | MUAP (ensemble) | 1 |
| MUAP (ensemble) | 1 | | |
| Semester Totals | 16 hrs | | 15 hrs |

Total Hours: 131

Total Hours Required for Graduation: 130

*Must satisfy University General Education Program Requirement

**Choose one from MUTC 3101, 3201, 3202, 4205, 4206, 4207

***Choose one from MUHL 4008, 4009, 4010, 4013

## Typical 4-Year Woodwinds Performance Concentration Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science * | 4 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 3 | MUAP (applied music) | 3 |
| MUAP 2002 | 1 | MUAP (large ensemble) | 1 |
| MUID 1001 | 1 | | |
| Semester Totals | 17 hrs | | 16 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| Literary Heritage* | 3 | HMSE 1100* | 2 |
| MUTC 2008 | 3 | MATH* | 3 |
| MUTC 2010 | 1 | American Heritage* | 3 |
| MUAP (applied music) | 3 | MUTC 3008 | 3 |
| MUAP 2107 | 1 | MUTC 3009 | 1 |
| American Heritage* | 3 | MUAP 2108 | 1 |
| MUAP 2002 | 2 | MUAP (applied music) | 3 |
| | | MUAP (large ensemble) | 1 |
| Semester Totals | 16 hrs | | 17 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| Social Science* | 3 | Hist/Phil Heritage* | 3 |
| Hist/Phil Heritage* | 3 | Theory elective** | 3 |
| MUHL 3301 | 3 | MUHL 3302 | 3 |
| MUAP (applied music) | 4 | MUAP (applied music) | 4 |
| MUAP (small ensemble) | 1 | MUAP (large ensemble) | 1 |
| MUAP (large ensemble) | 1 | MUAP 3999 | 1 |
| MUAP( 2nd instrument) | 3 | MUAP (small ensemble) | 1 |
| Semester Totals | 18 hrs | | 16 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| COMM 2381 | 3 | MUAP 4999 | 4 |
| Upper division elective | 3 | MUHL elective*** | 3 |
| Upper division elective | 3 | MUAP 2201 or 4263 | 2-4 |
| MUSE 3700 | 2 | Upper division elective | 3 |
| MUAP (applied music) | 4 | MUAP (ensemble) | 1 |
| MUAP (large ensemble) | 1 | MUAP (ensemble) | 1 |
| Semester Totals | 16 hrs | | 14-15 hrs |

Total Hours: 130-131

Total Hours Required for Graduation: 130

*Must satisfy University General Education Program Requirement

**Choose one from MUTC 3101, 3201, 3202, 4205, 4206, 4207

***Choose one from MUHL 4008, 4009, 4010, 4013

## Typical 4-Year Percussion Performance Concentration Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science * | 4 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 3 | MUAP (applied music) | 3 |
| MUAP 2002 | 1 | MUAP (large ensemble) | 1 |
| MUID 1001 | 1 | | |
| Semester Totals | 17 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| Literary Heritage* | 3 | HMSE 1100* | 2 |
| MUTC 2008 | 3 | MATH* | 3 |
| MUTC 2010 | 1 | American Heritage* | 3 |
| MUAP (applied music) | 3 | MUTC 3008 | 3 |
| MUAP 2107 | 1 | MUTC 3009 | 1 |
| American Heritage* | 3 | MUAP 2108 | 1 |
| MUAP 2002 | 2 | MUAP (applied music) | 3 |
| | | MUAP (large ensemble) | 1 |
| Semester Totals | 16 hrs | | 17 hrs |
| **Junior Year** | | | |
| Social Science* | 3 | Hist/Phil Heritage* | 3 |
| Hist/Phil Heritage* | 3 | Theory elective** | 3 |
| MUHL 3301 | 3 | MUHL 3302 | 3 |
| MUAP (applied music) | 4 | MUAP (applied music) | 4 |
| MUAP (small ensemble) | 1 | MUAP (large ensemble) | 1 |
| MUAP (large ensemble) | 1 | MUAP 3999 | 1 |
| MUAP 4520 | 3 | MUAP (small ensemble) | 1 |
| Semester Totals | 18 hrs | | 16 hrs |
| **Senior Year** | | | |
| COMM 2381 | 3 | MUAP 4999 | 4 |
| Upper division elective | 3 | MUHL elective*** | 3 |
| Upper division elective | 3 | MUHL 4030 | 3 |
| MUSE 3700 | 2 | Upper division elective | 3 |
| MUAP (applied music) | 4 | MUAP (ensemble) | 1 |
| MUAP (large ensemble) | 1 | | |
| Semester Totals | 16 hrs | | 14 hrs |

Total Hours: 130

Total Hours Required for Graduation: 130

*Must satisfy University General Education Program Requirement

**Choose one from MUTC 3101, 3201, 3202, 4205, 4206, 4207

***Choose one from MUHL 4008, 4009, 4010, 4013

## Typical 4-Year Sacred Music (Organ) Concentration Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| American Heritage* | 3 | American Heritage * | 3 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 2 | MUAP (applied music) | 2 |
| MUAP (large ensemble) | 1 | MUAP (large ensemble) | 1 |
| MUID 1001 | 1 | HMSE 1100 | 2 |
| PHED* | 2 | | |
| Semester Totals | 17 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| Literary Heritage* | 3 | Elective | 2 |
| Social Science* | 3 | Hist/Phil Heritage* | 3 |
| MUTC 2008 | 3 | MATH* | 3 |
| MUTC 2010 | 1 | MUAP (large ensemble) | 1 |
| MUAP (applied music) | 2 | MUTC 3008 | 3 |
| MUAP (large ensemble) | 1 | MUTC 3009 | 1 |
| MUTC elective | 2 | MUAP 2108 | 1 |
| MUAP 2107 | 1 | MUAP (applied music) | 3 |
| Semester Totals | 16 hrs | | 16 hrs |
| **Junior Year** | | | |
| Natural Science* | 4 | Natural Science* | 4 |
| Hist/Phil Heritage* | 3 | COMM 2381 | 3 |
| MUHL 3301 | 3 | MUHL 3302 | 3 |
| MUAP (applied music) | 2 | MUAP (applied music) | 2 |
| MUAP (ensemble) | 1 | MUAP (ensemble) | 1 |
| MUAP (ensemble) | 1 | MUSE 4701 | 2 |
| MUSE 3700 | 2 | MUAP (ensemble) | 1 |
| | | MUSA 4107 | 3 |
| Semester Totals | 16 hrs | | 19 hrs |
| **Senior Year** | | | |
| MUSA 4104 | 3 | MUAP 4999 | 4 |
| MUSA 4106 | 3 | MUHL elective*** | 3 |
| MUAP 1611 | 2 | Elective | 2 |
| Theory elective** | 3 | MUAP 1611 | 2 |
| MUAP (applied music) | 2 | MUSA 4105 | 3 |
| MUHL 4005 | 3 | | |
| Semester Totals | 16 hrs | | 14 hrs |

Total Hours: 130

Total Hours Required for Graduation: 130

*Must satisfy University General Education Program Requirement

**Choose one from MUTC 3101, 3201, 3202, 4205, 4206, 4207

***Choose one from MUHL 4008, 4009, 4010, 4013

## Typical 4-Year Sacred Music (Choral) Concentration Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| American Heritage* | 3 | American Heritage * | 3 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 2 | MUAP (applied music) | 2 |
| MUAP (large ensemble) | 1 | MUAP (large ensemble) | 1 |
| MUID 1001 | 1 | HMSE 1100 | 2 |
| PHED* | 2 | | |
| Semester Totals | 17 hrs | | 16 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| Literary Heritage* | 3 | MUHL** | 3 |
| Social Science* | 3 | Hist/Phil Heritage* | 3 |
| MUTC 2008 | 3 | MATH* | 3 |
| MUTC 2010 | 1 | MUAP (large ensemble) | 1 |
| MUAP (applied music) | 2 | MUTC 3008 | 3 |
| MUAP (large ensemble) | 1 | MUTC 3009 | 1 |
| MUSE 4211 | 2 | MUAP 2108 | 1 |
| MUAP 2107 | 1 | MUAP (applied music) | 2 |
| Semester Totals | 16 hrs | | 16 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| Natural Science* | 4 | Natural Science* | 4 |
| Hist/Phil Heritage* | 3 | COMM 2381 | 3 |
| MUHL 3301 | 3 | MUHL 3302 | 3 |
| MUAP (applied music) | 2 | MUAP (applied music) | 2 |
| MUAP (ensemble) | 1 | MUAP (ensemble) | 1 |
| MUAP (ensemble) | 1 | MUSE 4701 | 2 |
| MUSE 3700 | 2 | MUAP (ensemble) | 1 |
| Semester Totals | 16 hrs | | 16 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| MUSA 4104 | 3 | MUAP 4999 | 4 |
| MUSA 4106 | 3 | MUHL elective*** | 3 |
| Elective | 2 | MUAP (ensemble) | 1 |
| Theory elective** | 3 | Music elective | 2 |
| MUAP (applied music) | 2 | MUSA 4105 | 3 |
| MUAP (ensemble) | 1 | Elective | 2 |
| Elective | 3 | | |
| Semester Totals | 17 hrs | | 16 hrs |

Total Hours: 130

Total Hours Required for Graduation: 130

*Must satisfy University General Education Program Requirement

**Choose one from MUTC 3101, 3201, 3202, 4205, 4206, 4207

***Choose one from MUHL 4008, 4009, 4010, 4013

## Typical 4-Year Composition Concentration Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 2 | MUAP (applied music) | 2 |
| MUAP (large ensemble) | 1 | MUAP (large ensemble) | 1 |
| MUID 1001 | 1 | MUTC 2501 | 3 |
| Semester Totals | 16 hrs | | 18 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| Literary Heritage* | 3 | MUTC 2502 | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| MUTC 2008 | 3 | MATH* | 3 |
| MUTC 2010 | 1 | MUAP (large ensemble) | 1 |
| MUAP (applied music) | 2 | MUTC 3008 | 3 |
| MUAP (large ensemble) | 1 | MUTC 3009 | 1 |
| MUAP 2502 | 3 | MUAP 2108 | 1 |
| MUAP 2107 | 1 | MUAP (applied music) | 2 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 19 hrs | | 19 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| Social Science* | 3 | Hist/Phil Heritage* | 3 |
| Hist/Phil Heritage* | 3 | MUTC 4505 | 3 |
| MUHL 3301 | 3 | MUHL 3302 | 3 |
| MUTC 4209 | 3 | MUTC 4511 | 2 |
| MUAP (large ensemble) | 1 | MUAP (large ensemble) | 1 |
| MUTC 4501 | 3 | MUTC 4501 | 3 |
| MUSE 3700 | 2 | | |
| Semester Totals | 18 hrs | | 15 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| COMM 2381 | 3 | MUTC 4599 | 4 |
| MUTC 4501 | 3 | MUHL elective*** | 3 |
| MUTC 4206 | 3 | MUAP (large ensemble) | 1 |
| MUTC 4512 | 2 | MUTC 4102 | 3 |
| MUSE 3702 | 3 | MUHL 4406 | 3 |
| MUAP (large ensemble) | 1 | MUTC elective ** | 3 |
| Semester Totals | 15 hrs | | 17 hrs |

Total Hours: 137

Total Hours Required for Graduation: 130

*Must satisfy University General Education Program Requirement

**Choose one from MUTC 3101, 3201, 3202, 4205, 4206, 4207

***Choose one from MUHL 4008, 4009, 4010, 4013

## Typical 4-Year Music History Concentration Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 2 | MUAP (applied music) | 2 |
| MUAP (small ensemble) | 1 | MUAP (ensemble) | 1 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 16 hrs | | 16 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| COMM 2381 | 3 | Natural Science* | 4 |
| Natural Science* | 4 | MUTC 2108 | 1 |
| MUTC 2008 | 3 | MUID 1001 | 1 |
| MUTC 2010 | 1 | MUAP (ensemble) | 1 |
| MUAP (applied music) | 2 | MUTC 3008 | 3 |
| MUAP (large ensemble) | 1 | MUTC 3009 | 1 |
| MUAP 2107 | 1 | MUAP (applied music) | 2 |
| Foreign Language | 3 | Foreign Language | 3 |
| Semester Totals | 18 hrs | | 16 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| American Heritage* | 3 | MATH* | 3 |
| MUHL 3301 | 3 | American Heritage* | 3 |
| MUAP (applied music) | 2 | MUHL 3302 | 3 |
| | | MUTC 4511 | 2 |
| MUAP (ensemble) | 1 | MUAP (ensemble) | 1 |
| MUTC elective** | 3 | MUHL elective*** | 3 |
| MUSE 3700 | 2 | Elective | 3 |
| Semester Totals | 14 hrs | | 18 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| Social Science* | 3 | MUHL 4999 | 3 |
| MUHL 4259 | 3 | MUHL elective*** | 3 |
| MUHL elective | 3 | MUAP (ensemble) | 1 |
| MUHL elective | 3 | Literary Heritage* | 3 |
| MUSE 3702 | 3 | Elective | 3 |
| MUAP (ensemble) | 1 | MUHL elective | 3 |
| Semester Totals | 16 hrs | | 16 hrs |

Total Hours: 130

Total Hours Required for Graduation: 130

*Must satisfy University General Education Program Requirement

**Choose one from MUTC 3101, 3201, 3202, 4205, 4206, 4207

***Choose one from MUHL 4008, 4009, 4010, 4013

## Typical 4-Year Music Education (Instrumental) Concentration Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| COMM 2381 | 3 | American Heritage* | 3 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 2 | MUAP (applied music) | 2 |
| MUAP 2002 | 2 | MUAP (ensemble) | 1 |
| MUAP (ensemble) | 1 | PSYC 1200 | 3 |
| Hist/Phil Heritage* | 3 | | |
| Semester Totals | 19 hrs | | 17 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| Literary Heritage* | 3 | Natural Science* | 4 |
| Natural Science* | 4 | EDPR 2111 | 3 |
| MUTC 2008 | 3 | MUSE 1116 | 1 |
| MUTC 2010 | 1 | MUAP (small ensemble) | 1 |
| MUAP (applied music) | 2 | MUTC 3008 | 3 |
| MUAP (large ensemble) | 2 | MUTC 3009 | 1 |
| MUAP 2107 | 1 | MUAP (applied music) | 2 |
| MUSE 2002 | 3 | American Heritage* | 3 |
| | | HMSE 1100 | 2 |
| Semester Totals | 19 hrs | | 20 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| MATH* | 3 | Social Science* | 3 |
| MUHL 3301 | 3 | MUSE 2100 | 1 |
| MUAP (applied music) | 2 | MUHL 3302 | 3 |
| MUTC 3101 | 3 | MUSE 4700 | 2 |
| MUAP (ensemble) | 1 | MUAP (ensemble) | 1 |
| MUSE 4213 | 3 | MUAP (applied music) | 2 |
| MUSE 3700 | 2 | MUSE 1101 | 1 |
| MUSE 1104 | 1 | MUSE 4403 | 3 |
| MUSE 1112 | 1 | MUSE 4210 | 31 |
| | | MUAP (ensemble) | 1 |
| Semester Totals | 19 hrs | | 20 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| MUSE 1103 | 1 | MUSE 4999 | 3 |
| MUAP 3999 | 1 | MUSE 4911 | 9 |
| Hist/Phil Heritage* | 3 | | |
| SPED 2000 | 3 | | |
| MUSE 4205 | 3 | | |
| MUAP (ensemble) | 1 | | |
| MUAP (applied music) | 2 | | |
| MUID 1001 | 1 | | |
| Semester Totals | 15 hrs | | 12 hrs |

Total Hours: 141

Total Hours Required for Graduation: 134

*Must satisfy University General Education Program Requirement

### Typical 4-Year Music Education (Choral) Concentration Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| COMM 2381 | 3 | American Heritage* | 3 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 2 | MUAP (applied music) | 2 |
| HMSE 1100 | 2 | MUAP (ensemble) | 1 |
| MUAP (ensemble) | 1 | PSYC 1200 | 3 |
| Hist/Phil Heritage* | 3 | | |
| Semester Totals | 19 hrs | | 17 hrs |
| **Sophomore Year** | | | |
| Literary Heritage* | 3 | Natural Science* | 4 |
| Natural Science* | 4 | MUAP 2108 | 1 |
| MUTC 2008 | 3 | MUSE 1116 | 1 |
| MUTC 2010 | 1 | MUAP (ensemble) | 1 |
| MUAP (applied music) | 2 | MUTC 3008 | 3 |
| MUAP (ensemble) | 1 | MUTC 3009 | 1 |
| MUAP 2107 | 1 | MUAP (applied music) | 2 |
| MUSE 2002 | 3 | MUSE 1119 | 1 |
| PHED* | 2 | Social Science* | 3 |
| Semester Totals | 20 hrs | | 17 hrs |
| **Junior Year** | | | |
| MATH* | 3 | EDPR 2111 | 3 |
| MUHL 3301 | 3 | MUSE 2100 | 1 |
| MUAP (applied music) | 2 | MUHL 3302 | 3 |
| MUTC 3101 | 3 | MUSE 4701 | 2 |
| MUAP (ensemble) | 1 | MUAP (large ensemble) | 1 |
| MUSE 4213 | 3 | MUAP (applied music) | 2 |
| MUSE 3700 | 2 | MUSE 1101 | 1 |
| MUSE 1104 | 1 | MUSE 4405 | 3 |
| MUSE 4211 | 2 | MUAP (ensemble) | 1 |
| Semester Totals | 20 hrs | | 17 hrs |
| **Senior Year** | | | |
| MUSE 1103 | 1 | MUSE 4999 | 3 |
| MATH* | 3 | MUSE 4911 | 9 |
| Hist/Phil Heritage* | 3 | | |
| SPED 2000 | 3 | | |
| American Heritage* | 3 | | |
| MUAP (ensemble) | 1 | | |
| MUAP (applied music) | 2 | | |
| MUID 1001 | 1 | | |
| Semester Totals | 17 hrs | | 12 hrs |

Total Hours: 139

Total Hours Required for Graduation: 134

*Must satisfy University General Education Program Requirement

# MUSIC INDUSTRY

## Rudi E. Scheidt School of Music

The Bachelor of Music degree in Music Industry is designed for students whose interests and abilities indicate a strong potential for significant achievement in the music industry. Two concentrations are available: Music Business and Recording Technology Admission: Admission is based on selective procedures, and admission to the University does not guarantee placement in the Music Industry Program. Stringent quality control is essential; therefore, an assessment is required of all students desiring to enter the program. Entrance requirements vary by concentration. Specific admissions criteria may be obtained through the office of the Director, School of Music. Through the admissions procedure, preliminary estimates of student commitment and potential success can be made. Upon admission, the student will be assigned an advisor.

Retention: The student's progress and continued potential will be reviewed twice yearly by the appropriate Music Industry faculty. Permission to continue in the program will be based upon this evaluation. Retention criteria may be obtained through the office of the Director, School of Music.

Piano Proficiency: Students in Music Business or Recording Technology have no piano proficiency requirement.

Ensembles: Students in Music Business or Recording Technology have no ensemble requirement.

Concert Attendance: All students Music Business and Recording Technology are required to attend a minimum of 50 concerts or recitals during their four-year program. Records will be maintained in the School on the number of events attended by each student and a report will be filed with the Director of the School each year.

Experiential Learning: Credit may be awarded for validated learning from experience or non-traditional instruction. Students who wish to apply for credit for experiential learning may obtain guidelines for this procedure from the Dean of the College of Communication and Fine Arts. (See Fees and Charges, for related fee information.)

Graduation from the Program: A minimum of 139 hours is required for graduation; a minimum grade of "C" and a grade point average of 2.5 are required in every graded course applicable to the major.

## Music Industry Major (B.M.)

### A. University General Education Program (42 - 45 hours)

See page 57 for the University General Education Program requirements. Note the following B.M. degree with a major in Music Industry program specifications: (1) select three hours from either Global or non-Global Social Science courses; (2) must take MATH 1830 for the Mathematics requirement, and complete with a minimum grade of "C"; (3) PHYS 2110/2111 and PHYS 2120/2121 (Natural Science requirement) are preferred. The Fine Arts Heritage category is satisfied for students who meet all B.M. requirements.

### B. The Major (97 hours)

1. *Major Core (28 hours)*
   MUTC 1012, 1013, 2012, 2013; MUHL 3303; MUAP 1105 (1), 1116 (2), 1xxxx (applied instruction) (4); MUID 3103; choose one: MUHL 4801, 4804, 4805, 4806, 4807; 50 concert/recital attendance requirements prior to graduation.
2. *Concentration (69 hours)*
   a. *Music Business* (69 hours)
      ACCT 2010, 2020; MUID 1001 (1), 2201 (2), 3104, 3505, 3602, 4603, 4820, 4840, 4850, 4898 [I], 4899 (1-3); ECON 2110, 2120; FIR 3011, 3410; ISDS 2710; JOUR 3900, 4500, 4900; MGMT 3110, 3510; MKTG 3010.

b. *Recording Technology* (69 hours)
MUID 2201 (2), 3602, 3800 (4), 3801, 4603, 4800 (4); 4802 (4), 4803 (4), 4811 (1), 4830, 4840, 4898 [I]; COMM 3823 (4), 3824 (4); choose one: COMM 4822, 4825; COMP 4001, EETH 1811, 2821; ENGL 3601, JOUR 3900, 4500, 4900.

**C. Electives (0 - 3 hours)**

Elective courses may be chosen to bring the total number of hours to 139.

**D. Computer Literacy**

JOUR 3900 or JOUR 4900 will satisfy this requirement.

## Typical 4-Year Music Business Concentration Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1830 | 3 | MUTC 1013 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| MUTC 1012 | 3 | MUAP 1116 | 1 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| MUAP 1105 | 1 | MUAP (applied music) | 2 |
| Semester Totals | 19 hrs | | 18 hrs |
| **Sophomore Year** | | | |
| MUTC 2012 | 3 | Literary Heritage* | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| COMM 2381 | 3 | MUTC 2013 | 3 |
| MUAP (applied music) | 2 | MUID 3103 | 3 |
| MUID 1001 | 1 | ECON 2110 | 3 |
| Social Science* | 3 | MUHL 3003 | 3 |
| MUID 2201 | 2 | | |
| Semester Totals | 17 hrs | | 18 hrs |
| **Junior Year** | | | |
| MKTG 3010 | 3 | MUID 3104 | 3 |
| MUID 3602 | 3 | MUAP (applied music) | 2 |
| ACCT 2010 | 3 | MGMT 3510 | 3 |
| MUID 3505 | 3 | ACCT 2020 | 3 |
| ECON 2120 | 3 | JOUR 3900 | 3 |
| MGMT 3110 | 3 | ISDS 2710 | 3 |
| Semester Totals | 18 hrs | | 17 hrs |
| **Senior Year** | | | |
| JOUR 4900 | 3 | MUID 4850 | 3 |
| FIR 3410 | 3 | MUID 4840 | 3 |
| MUAP (applied music) | 2 | MUID 4899 | 1-3 |
| JOUR 4500 | 3 | MUID 4899 | 3 |
| MUID 4603 | 3 | MUHL elective** | 3 |
| FIR 3011 | 3 | MUID 4820 | 3 |
| Semester Totals | 17 hrs | | 16-18 hrs |

Total Hours: 140-142

Total Hours Required for Graduation: 139

*Must satisfy University General Education Program Requirement

** Choose one: MUHL 4801, 4804, 4805, 4806, 4807

## Typical 4-Year Recording Technology Concentration Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1830 | 3 | MUID 2201 | 2 |
| Natural Science* | 4 | Natural Science* | 4 |
| MUTC 1012 | 3 | MUAP 1116 | 1 |
| American Heritage* | 3 | EETH 1811 | 3 |
| MUAP (applied music) | 1 | MUTC 1013 | 3 |
| MUAP 1105 | 1 | MUAP (applied music) | 1 |
| Semester Totals | 18 hrs | | 17 hrs |
| **Sophomore Year** | | | |
| MUTC 2012 | 3 | Hist/Phil Heritage* | 3 |
| Hist/Phil Heritage* | 3 | COMM 2381 | 3 |
| EETH 2821 | 3 | MUTC 2013 | 3 |
| MUAP (applied music) | 1 | MUID 3801 | 2 |
| MUID 3800 | 4 | MUAP (applied music) | 1 |
| American Heritage* | 3 | MUID 4800 | 4 |
| | | HMSE 1100 | 2 |
| Semester Totals | 17 hrs | | 18 hrs |
| **Junior Year** | | | |
| MUHL 3303 | 3 | MUHL** | 3 |
| JOUR 3900 | 3 | COMM 3824 | 3 |
| COMM 3823 | 3 | MGMT 3510 | 3 |
| MUID 4802 | 4 | MUID 4803 | 4 |
| MUID 4840 | 3 | MUID 3103 | 3 |
| PHED* | 3 | MUID 4811 | 1 |
| Semester Totals | 18 hrs | | 17 hrs |
| **Senior Year** | | | |
| COMM 4825 or 4822 | 3 | Social Science* | 3 |
| COMP 4001 | 3 | ENGL 3601 | 3 |
| Literary Heritage* | 3 | MUID 4830 | 3 |
| MUID 4603 | 3 | MUID 4898 [I] | 3 |
| MUID 3602 | 3 | JOUR 4500 | 3 |
| Semester Totals | 15 hrs | | 15 hrs |

Total Hours: 135

Total Hours Required for Graduation: 139

*Must satisfy University General Education Program Requirement

** Choose one: MUHL 4801, 4804, 4805, 4806, 4807

# THEATRE

## Department of Theatre and Dance

The Bachelor of Fine Arts degree is a program specifically designed for students whose certain interests and abilities strongly suggest the potential for pursuing careers as artists in the resident, professional, community, or academic theatre. To expand the student's creative powers and deepen the commitment to a vocation in the theatre, the B.F.A. program offers the student: (1) a basic probing of all the arts and crafts of the theatre; (2) an exploration in depth of one area of special interest; (3) the opportunity to participate creatively as a theatre artist through extensive production experience. Three concentrations are offered: I. Performance, II. Design and Technical Production, and III. Dance. Students entering the B.F.A. program will elect one of these three areas for concentrated study. The student normally will begin specialized

training and the audition/portfolio review process not later than the sophomore year. The University of Memphis is an accredited institutional member of the National Association of Schools of Theatre.

**Admission and Retention Criteria:** Admission to the B.F.A. program is by application. To remain in good standing as a major, the student must be evaluated through the audition/interview or portfolio review/interview process. Following their audition/interview or portfolio review/interview, applicants will be notified as to whether they have been accepted into the program, accepted for one more semester on a probationary basis, or advised to pursue another major.

(1) Performance: Retention in the Performance concentration is based on a required audition and interview Typically twice yearly. In addition to the interview, the student is expected to present an audition consisting of a song, a group dance audition, and presentation of two monologues from plays of distinctly different styles and/or periods. The total time of the monologues may not exceed five minutes.

(2) Design and Technical Production: Retention in the Design and Technical Production concentration is based on an annual required portfolio review and interview. In addition to the interview, the student is expected to present a portfolio of artistic and production work. This may consist of items including photographs, sketches, costume plates, elevations, lighting plots, and ground plans.

(3) Dance: Retention in the Dance concentration is based on an annual required audition and interview. In addition to the interview, the student is expected to participate in a group audition and to choreograph and perform a two to three minute dance solo.

**NOTE:** The fact must be emphasized that admission to the B.F.A. program does not imply a student's permanent tenure in the program. Beyond the audition interview or portfolio review, the student's active participation in the co-curricular activities of the department will be assessed by the Theatre and Dance faculty. Artistic growth, development of technical facility, and continuing commitment to creative excellence on the part of the student will be evaluated. Permission to continue in the program will be based on this evaluation.

**Transfer of Credit:** In certain cases students may be admitted to an advanced level of the B.F.A. program. Such admission will be based upon: (1) an audition and interview; (2) the student's previous course work in theatre, particularly in the area of special interest; (3) the student's previous involvement in production experience; (4) letters of recommendation from former Theatre Arts instructors and/or directors. Even if admitted to an advanced standing, the student will be required to remedy previous course deficiencies.

**Advising:** Upon application to the B.F.A. program, each student will be assigned a faculty advisor. For this degree, a minimum of 136 semester hours are required for graduation. A minimum grade of "C" is required in all theatre and dance courses applicable to the major. The student must maintain an overall grade point average of 2.0. A 2.0 cumulative GPA is required for all courses completed in the major.

## Theatre Major (B.F.A.)

### A. University General Education Program (49 - 52 hours)

See page 57 for the University General Education Program requirements. Note that THEA 1030 or DANC 1151 is specified for the *Fine Arts Heritage* requirement.

### B. The Major (71 - 82 hours)

1. *Major Core (23 - 26 hours)*
   Completion of THEA 1561, 2511, 2531(4), 3412, 4 hours of THEA 3601-3609, 4541* (1-6), 4591 [C].
2. *Concentrations (48 - 56 hours)*
   a. *Performance (48 hours):* THEA 1411, 2532 (4), 3212 (4), 3213, 3505, 3506, 3531 (4), 3532 (4), 3551 (1), 1 of 3601-3609 (1), 4455, 4457, 4521, 4551, 4552, 4582 [W,I]
   b. *Design and Technical Production (53 hours):* THEA 1411, 2512, 3511, 3561, 3562, 2 of 3601-3609 (2), 4514, 4551, 4552, 4555, 4556, 4557, 4561, 4562, 4563, 4582 [W,I], 4595, 4596
   c. *Dance (56 hours):* DANC 2101, 2821 (4), 2825 (4), 3101 [W], 3201, 3829 (12), 4101 (6), 4201, 4202 [I], 4301 (3), 4582, Choose 6 hrs. from among THEA 3505, 3506, 4501; Music (3) to be selected with adviser;
   *NOTE: THEA 4541 Internship (see course description section.): The intent of this requirement and course is to provide the student experience in a full-time theatre production situation or, in the case of dance students, an intensive professional workshop. Off-campus participation (usually following the junior year) is an essential element of the B.F.A. degree program. Details are to be planned in advance in conference with the student's advisor.

### C. Electives (3 - 27 hours)

Elective courses to complete the total of 136 semester hours, chosen in conference with the student's advisor.

### D. Computer Literacy

This requirement is met by successfully passing COMP 1200, or a course approved by the dean, or passing an approved computer literacy examination.

### E. Honors Program

The Honors Program offers superior students the opportunity to engage in an intensive and individualized course of study leading to a Bachelor of Fine Arts degree with Departmental Honors. The program enables honors students to develop their particular talents, interests, and abilities within a curriculum designed to encourage academic independence and creativity.

Admission: To be eligible for admission to the Honors program, a student must meet the following requirements: (a) the completion of 55 semester hours of college course work (or Junior standing), (b) an overall grade point average of 3.25 or better, (c) a departmental grade point average of 3.25 or better. Students who have not met all of these requirements may apply for admission into the program, and their applications will be considered on a "provisional admittance" basis. Applications may be obtained from the Director of the Honors Program or from the main office of the department. Completed applications should be submitted to the Director of the Honors Program at least two weeks before the end of each semester. Students may be admitted to the program at the end of any semester (including summer semesters).

Requirements: To graduate with departmental honors, an honors student must fulfill the following requirements:

(a) The completion of a minimum of 18 hours of honors work. Twelve of these hours must be in upper division departmental honors work, and a maximum of 6 hours may be in lower division or extra-departmental honor work.

(b) The completion of an honors project or thesis in the senior year.

(c) The maintenance of an overall grade point average of 3.0 and a departmental grade point average of 3.25.

An honors student may earn departmental undergraduate honors credit in three ways: (1) by taking THEA 4980, "Honors Studies" (for a maximum of 15 hours credit); (2) by taking THEA 4999, "Senior Honors Thesis" (for a maximum of six hours); and (3) by taking THEA 4982, "Honors Seminar" (for a maximum of 9 hours) for a combined total of no more than 18 hours. This will allow honors students to enroll in those departmental seminars that most specifically reflect their particular interests in theatre. An honors student majoring in any field of concentration in the department will be able to substitute honors credit for certain track requirements for graduation. Contracting for honors credit in other courses or enrolling in Independent Study or Special Problems courses will not fulfill Honors Program requirements.

After completing 6 hours of Honors Studies, honors students may begin work on their projects or theses. These projects will be under the direct supervision of the Director of the Honors Program although students may ask any member of the departmental faculty to sit on their committees (three faculty members will sit on each student's committee). Typically, an honors student earns 6 hours of credit for the project, 3 of which reflect a semester of research or preparation, while the final 3 hours reflect a semester of writing or assembling the project. The honors project does not have to be a thesis; the nature of the project will depend on the student's interests, talents, and course work and will be decided on an individual basis by the Director of the Honors Program.

For further information about the Honors Program, contact the chair of the Department of Theatre and Dance.

## Theatre Minor

Any student wishing to minor in any area of the Department of Theatre and Dance should see the department chair who will assign an appropriate advisor. The minor must

consist of a minimum of 18 hours of approved coursework, 9 of which must be upper division. Coursework for all minors will be determined by the student in conference with the advisor with the approval of the department chair.

## Typical 4-Year Dance Concentration Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| HMSE 1100 | 2 | Comp Literacy | 3-4 |
| DANC 1151 or THEA 1030 | 3 | THEA 1561 | 3 |
| THEA 2511 | 3 | COMM 2381 | 3 |
| DANC 2821 or 2825 | 2 | DANC 2825 or 2821 | 2 |
| Semester Totals | 16 hrs | | 17-18 hrs |
| **Sophomore Year** | | | |
| ENGL 2201 | 3 | American Heritage* | 3 |
| American Heritage* | 3 | [1]DANC 2101 | 3 |
| MATH* | 3 | THEA 3601-9 | 1 |
| THEA 2501 | 3 | DANC 2821 or 2825 | 2 |
| THEA 2531 | 4 | DANC 4101 | 3 |
| DANC 2821 or 2825 | 2 | MATH* | 3 |
| | | Computer Literacy | 3-4 |
| Semester Totals | 18 hrs | | 18-19 hrs |
| **Junior Year** | | | |
| DANC 3829 | 4 | DANC 3829 | 4 |
| THEA elective | 1 | [1]DANC 4201 | 3 |
| Social Science* | 3 | THEA 3601-9 | 1 |
| Music elective | 3 | Social Science* | 3 |
| [1]DANC 3201 | 3 | DANC 4101 | 3 |
| [1]THEA 3412 | 3 | THEA 3601-9 | 1 |
| | | Elective | 3 |
| Semester Totals | 17 hrs | | 18 hrs |
| **Senior Year** | | | |
| DANC 3829 | 4 | DANC 4202 [I] | 3 |
| Natural Science* | 4 | THEA 4541 | 1-6 |
| THEA 3601-9 | 1 | Natural Science* | 4 |
| DANC 4301 | 1-3 | THEA elective | 3 |
| [1]DANC 3101 [W] | 3 | THEA 4591 [C] | 3 |
| THEA 4582 | 3 | | |
| Semester Totals | 16-18 hrs | | 14-19 hrs |

Total Hours: 134-141

Total Hours Required for Graduation: 136

[1]Offered alternate years only

*Must satisfy University General Education Program Requirement

## Typical 4-Year Design and Technical Production Concentration Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| HMSE 1100 | 2 | Comp Literacy | 3 |
| THEA 1030 or DANC 1151 | 3 | THEA 1561 | 3 |
| THEA 3601-9 | 1 | THEA 3601-9 | 1 |
| THEA 2511 | 3 | | |
| THEA 1411 | 3 | | |
| Semester Totals | 18 hrs | | 13 hrs |
| **Sophomore Year** | | | |
| Natural Science* | 4 | Natural Science* | 4 |
| American Heritage* | 3 | American Heritage* | 3 |
| THEA 3511 | 3 | MATH* | 3 |
| THEA 2531 | 4 | ENGL 2201 | 3 |
| THEA 3562 | 3 | THEA 2512 | 3 |
| THEA 3601-9 | 1 | THEA 3601-9 | 1 |
| | 18 hrs | | 18 hrs |
| **Junior Year** | | | |
| THEA 3561 | 3 | THEA 3412 | 3 |
| THEA 4551 | 3 | THEA 4552 | 3 |
| THEA 4556 | 3 | THEA 4557 | 3 |
| THEA 4563 | 3 | THEA 4562 | 3 |
| Elective | 3 | Elective | 3 |
| THEA 3601-9 | 1 | THEA 3601-9 | 1 |
| Semester Totals | 16 hrs | | 16 hrs |
| **Senior Year** | | | |
| Social Science* | 3 | Social Science* | 3 |
| THEA 4555 | 3 | THEA 4591 [C] | 3 |
| THEA 4561 | 3 | Elective | 3 |
| THEA 4595 | 3 | Tech Elective | 3 |
| THEA 4582 [W,I] | 3 | THEA 4596 | 3 |
| THEA 4514 | 3 | THEA 4541 | 1-6 |
| | | COMM 2381 | 3 |
| Semester Totals | 18 hrs | | 19-24 hrs |

Total Hours: 136-142

Total Hours Required for Graduation: 136

*Must satisfy University General Education Program Requirement

## Typical 4-Year Performance Concentration Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| HMSE 1100 | 2 | Comp Literacy | 3-4 |
| THEA 1030 or DANC 1151 | 3 | THEA 1411 | 3 |
| THEA 3601-9 | 1 | THEA 3601-9 | 1 |
| THEA 2511 | 3 | THEA 1561 | 3 |
| Semester Totals | 15 hrs | | 16-17 hrs |

| | | | |
|---|---|---|---|
| | **Sophomore Year** | | |
| Literary Heritage* | 3 | American Heritage | 3 |
| American Heritage* | 3 | COMM 2381 | 3 |
| Elective | 3 | THEA 2532 | 4 |
| THEA 2531 | 4 | THEA 3601-9 | 1 |
| THEA 3601-9 | 1 | MATH* | 3 |
| THEA 3412 | 3 | Elective | 3 |
| Semester Totals | 17 hrs | | 17 hrs |
| | **Junior Year** | | |
| THEA 3212 | 4 | THEA 3213 | 3 |
| THEA 3505 | 3 | THEA 3506 | 3 |
| THEA 3531 | 4 | THEA 3532 | 4 |
| THEA 4551 | 3 | THEA 4552 | 3 |
| THEA 4582 [W,I] | 3 | THEA 3601-9 | 1 |
| | | Elective | 3 |
| Semester Totals | 17 hrs | | 17 hrs |
| | **Senior Year** | | |
| Social Science* | 3 | Social Science* | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| THEA 3551 | 1 | THEA 4591 [C] | 3 |
| THEA 4457 | 3 | THEA 4455 | 3 |
| THEA 4521 | 3 | THEA 4541 | 3 |
| THEA 4541 | 3 | Elective | 3 |
| Semester Totals | 17 hrs | | 19 hrs |

Total Hours: 135-136

Total Hours Required for Graduation: 136

*Must satisfy University General Education Program Requirement

# The College of Education

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MARY LEE HALL, Ed.D.
*Assistant Dean for Undergraduate Studies*

| Department | Major | Concentration Within Major | Degree Offered |
|---|---|---|---|
| Consumer Science and Education | Consumer Science and Education | (1) Dietetics<br>(2) Family and Consumer Science Education<br>(3) Food Systems Management<br>(4) Merchandising – Fashion<br>(5) Merchandising – Home Furnishings | Bachelor of Science in Education (B.S.Ed.) |
| Human Movement Sciences and Education | Exercise and Sport Science Physical Education Teacher Education | | Bachelor of Science in Education (B.S.Ed.) |
| | Sport and Leisure Studies | (1) Leisure Management<br>(2) Sport Management | Bachelor of Science in Education (B.S.Ed.) |
| Instruction and Curriculum Leadership | Human Development and Learning | | Bachelor of Science in Education (B.S.Ed.) |
| | Integrative Studies | (1) Early & Middle Grades K-8 Licensure<br>(2) Society Services Non-Licensure | Bachelor of Science in Education (B.S.Ed.) |
| | Special Education | | Bachelor of Science in Education (B.S.Ed.) |

Individual program requirements described in *The University of Memphis 2003-2004 Undergraduate Bulletin* are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this *Bulletin*; or consult the Undergraduate Bulletin website at: *http://www.people.memphis.edu/~acadafflib/bulletin/bulletin.htmlx* for the latest updates.

## PURPOSES

The College of Education is dedicated to preparing students for careers in a variety of professional and related occupational areas. In helping the University pursue its three broad objectives of teaching, public service, and research, the College of Education is committed to the following missions. The first mission of the College of Education is to prepare teachers, other licensed school personnel, and educationally related professionals who are qualified and competent in both practice and theory. The second mission is to conduct educational and educationally related research and to engage in the dissemination of the outcomes of that research. The third mission of the college is tightly interwoven with the two preceding missions: to provide teaching, research, and service that extends beyond the confines of the campus and to make educational delivery available in its urban setting and at other outreach locations.

The departments in the college value the pursuit and practice of quality teaching and research in a multi-cultural setting. Specifically, the college actively seeks to foster the advancement of knowledge and pedagogy involved in educational training in school and non-school settings. With a priority on urban-related studies, both faculty and students are engaged in timely, diverse experiences of a scholarly nature.

This mission and vision for the College of Education is embodied in the theme of Educational Leaders. The college seeks to prepare leaders who demonstrate a thorough knowledge of the learning process, skill in instructional planning and delivery, and a disposition to create dynamic learning environments that incorporate multi-cultural knowledge into instructional design and delivery. Multiple performance assessment measures are used to identify what teacher candidates know and can do and their impact on P-12 students based on eleven learning outcomes derived from the Interstate New Teacher Assessment Support Consortium (INTASC) standards for teacher preparation.

## ORGANIZATION OF THE COLLEGE

Five academic departments make up the College of Education: Consumer Science and Education; Counseling, Educational Psychology and Research; Instruction and Curriculum Leadership; Human Movement Sciences and Education; and Leadership. Three departments offer undergraduate degrees, and all departments offer a variety of graduate degree programs.

In addition, there are several research and service units in the college: Advisory Services, The Bureau of Educational Research and Services, The Center for the Study Higher Education, The Reading Center, The Center for Environmental and Energy Education, The Center for Research in Educational Policy, Bureau of Sport and Leisure Commerce, Human Performance Laboratory, Exercise Biochemistry Laboratory, Motor Behavior Laboratory, Exercise and Sport Nutrition Laboratory, Wellness Evaluation and Resource Unit, The Barbara K. Lipman Early Childhood School and Research Institute, and the University Campus School.

### College Honors Program

The College of Education is in the process of adding an Honors Program. Consult with the COE advisor for further information.

## Academic Advising

Student advising in the College of Education is an essential support service provided to assist students in the process of clarifying academic goals consistent with their interests, abilities, values, and resources. Advisors provide academic, career, and professional information to assist students in developing realistic personal and career goals. Advisors also provide information about university support services and resources available to students.

All undergraduate students entering the college are advised initially by the College of Education Advisory Services Office. The COE Advisor assists students in becoming familiar with programs offered in the college and guides them through the beginning phases of their programs. Later faculty advisors/mentors or program coordinators in specific majors assist the students until graduation. This assistance does not relieve the student of the primary responsibility of studying the *Bulletin* and fulfilling all degree requirements. Art and Music majors are advised in the College of Communication and Fine Arts. Information concerning the Teacher Education Program and student teaching for these majors can be obtained there.

# AREAS OF PROFESSIONAL TRAINING

The College of Education offers a wide selection of general and specialized programs that are designed to prepare students for a variety of careers.

## Careers in Teaching

One of the most important professions in a society is teaching its children and young people. Preparing students to become excellent teachers is a primary goal of the College of Education. A career in teaching offers a wide range of specialization choices and opportunities in pre-kindergarten, kindergarten, elementary, middle school, and senior high schools.

Through the College of Education, there are programs at the undergraduate level for licensure in early childhood, elementary, special education, and physical education.

Students who wish to prepare for endorsements in secondary education will be expected to complete a baccalaureate degree in the appropriate teaching area followed by a fifth-year Master of Arts in Teaching or licensure program through the College of Education.

Preparation for the various teaching areas includes a significant professional education component that emphasizes both a comprehensive knowledge base and an extensive skills requirement to ensure pedagogical competency. To meet these objectives, there are provisions for significant laboratory and field experiences culminating in enhanced student teaching in the student's final year.

# B.S.Ed. REQUIREMENTS (TEACHER LICENSURE)

### Professional Studies for Educators

Professional studies in the College of Education consist of both generic courses taken by all persons planning careers as educators and specialized studies related to specific professional practice settings. All teacher education students will study knowledge and skills in human development, basic instruction, technology, foundations, cultural diversity, and children with special needs. Students must also know and display dispositions expected of educators. Required courses for knowledge and skills include EDPR 2111, LEAD 2010, ICL 4800, SPED 2000, and student teaching. Necessary skills in assessment, behavior management and specialized instructional methods are incorporated in courses delivered by their respective specialty areas. Specific requirements are listed in the section of the *Bulletin* addressing each major.

### Accreditation

The College of Education holds membership in the American Association of Colleges for Teacher Education. Its undergraduate programs, as well as all graduate degree programs through the doctoral degree for the preparation of teachers and related school personnel, are approved by the Tennessee State Department of Education. The College is fully accredited by the National Council for Accreditation of Teacher Education (NCATE).

### Licensure Areas

Areas of licensure that are available at the completion of undergraduate education programs include:

| | |
|---|---|
| Special Education | |
| Modified K-12 | (460) |
| Comprehensive K-12 | (461) |
| Physical Ed K-12 | (420) |
| Elementary | (402) |
| Early Childhood Pre K-4 | (497) |
| Visual Arts | (427) |
| Music Inst. K-12 | (429) |
| Music Voc./Gen K-12 | (428) |

Recommendation for teacher licensure in any of the following teaching areas is contingent upon the completion of a baccalaureate degree in the appropriate academic area followed by completion of the Master of Arts in Teaching degree or licensure program:

| | |
|---|---|
| Elementary | (402) |
| Early Childhood Pre K-4 | (497) |
| Special Education | |
| Modified K-12 | (460) |
| Compreh. K-12 | (461) |
| Early Ch. Pre K-1 | (465) |
| Physical Ed. K-12 | (420) |
| **Secondary** | |
| English 7-12 | (407) |
| French K-12 | (491) |
| German K-12 | (492) |
| Spanish K-12 | (495) |
| Russian K-12 | (494) |
| Latin K-12 | (493) |
| Other Foreign Language | (496) |
| Mathematics 7-12 | (413) |
| Biology 7-12 | (415) |
| Chemistry 7-12 | (416) |
| Physics 7-12 | (417) |
| Earth Science 7-12 | (418) |
| History 7-12 | (421) |
| Government 7-12 | (423) |
| Geography 7-12 | (422) |
| Economics 7-12 | (424) |
| Psychology 9-12 | (426) |
| Sociology 9-12 | (425) |
| **Vocational Subject Areas** | |
| Business Education | (474) |
| Business Technology | (475) |
| Marketing | (471) |
| Consumer Hmkng. 5-12 | (450) |
| Care/Gdce Child 9-12 | (451) |
| Food Mgt. Prod 9-12 | (453) |

Students who intend to enter the Master of Arts in Teaching program should consult their major advisor and the College of Education Advisor for information about this program to ensure that the general education curriculum, pre-professional studies, and teacher licensure requirements are completed.

**Other Graduate Areas**

| | |
|---|---|
| Speech/Language Pre K-12 | (464) |
| Counselor K-12 | (487) |
| School Administrator | |
| Begin K-12 (A Standard) | (481) |
| Professional Administrator PreK-12 | (483) |
| School Psychologist | (089) |
| Library Info System | (073) |
| English as a Second Language | (490) |

**Old Licensure Areas Still Operating**

| | |
|---|---|
| Special Teacher of Reading K-8 | (075) |
| Special Teacher of Reading 7-12 | (076) |

## Admission to Teacher Education Program

Students who plan to pursue an undergraduate program of studies leading to teacher licensure must submit a formal application to the College of Education Teacher Education Program (TEP). Students are encouraged to apply for admission in their sophomore year.

Prerequisites for formal admission to the Teacher Education Program are as follows:

1. Admission application completed and submitted.
2. Minimum grade of "C" (2.0) in ENGL 1010, 1020, COMM 2381, EDPR 2111, and LEAD 2010.
3. Satisfactory scores on the Pre-Professional Skills Tests (PPST) or an ACT Enhanced score of 22 or higher according to criteria established by the Tennessee State Board of Education and the College of Education, The University of Memphis.
4. Minimum of 25 semester hours completed.
5. Overall minimum GPA of 2.5.
6. Satisfactory completion of a personal interview and PPST writing exam.

## Appeals

Candidates who do not meet the regular Teacher Education Program (TEP) Admissions criteria may apply for a conditional admission if their deficiencies can be remediated within one semester. Conditional admission status can be secured for one semester only. Candidates must have submitted the TEP application, secured recommendations, and completed the interview before filing for an appeal. If the appeal is for test scores, the PPST must have been taken twice and if the appeal is for grade point average (GPA), the minimum GPA must be 2.4.

## Alternative Admissions

Candidates who have a minimum GPA of 2.5 can apply for the opportunity to pursue an alternative admissions route to TEP. Alternative admissions is for test scores only and the candidate must have taken the PPST at least twice before applying. Application for alternative admissions does not guarantee admission.

A committee comprised of university personnel and school practitioners meets twice each semester to make decisions about appeals and alternative admissions.

## Retention

Candidates may be referred for retention throughout their program of studies. Referrals can be made for academics, but also for teacher dispositions related to ethical or attitudinal problems. The NEA Code of Ethics as well as other professional association code of ethics guide the retention process. Candidates may be referred for counseling or to review before the TEP Retention Committee.

## Pre-Student Teaching Clinical Experiences

Students pursuing teacher licensure complete, as a part of their program, a variety of required clinical experiences incorporated into professional education courses. Students will be expected to have experiences in a variety of settings and with pupils who reflect differences in age, socioeconomic backgrounds, and cultural heritage.

Clinical experiences include both laboratory experiences (typically fulfilled on campus) and field experiences (typically fulfilled in PreK-12 public schools). The early childhood programs require field experiences in PreK-4 grade. The elementary program requires placements at the PreK-4 and 5-8 grade level. Other licensure programs require placements in a variety of grades (K-12). When available, field experiences take place in Professional Development Schools with clinically trained cooperating teachers. The amount of time spent in a clinical experience varies according to the specific requirement being met. Fulfillment of these experiences requires that students make available out-of-class time between 7:00 a.m. and 4:00 p.m. All students are required to complete the number of field experience hours expected in their licensure area.

Completion of field experiences will occur in sites arranged and approved by The University of Memphis College of Education Office of Teacher Education.

## Student Teaching

Students who pursue degree programs at The University of Memphis that lead to teacher licensure must complete their student teaching requirements in placements arranged, coordinated, and approved by the Student Teacher Placement Coordinator of the College of Education. Student teaching assignments are full day in length for 15 weeks.

Student teaching is offered only during the fall and spring semesters in area schools. No student teaching assignments for initial licensure are made during the summer semester. Under the direction of cooperating teachers and university supervisors, opportunities are provided for observation of sound teaching practices and for realistic experiences culminating in assumption of full-time teaching responsibilities.

All students seeking initial licensure are required to complete a professional semester consisting of a minimum of 15 weeks of student teaching and an associated seminar. NO OTHER COURSES MAY BE TAKEN DURING THE PROFESSIONAL SEMESTER.

Students who have completed all or part of their student teaching experiences before enrolling at The University of Memphis, and who desire to receive this institution's recommendation for licensure, should expect to complete a minimum of six semester hours of credit in student teaching at The University of Memphis.

Grades in student teaching are reported as "S" (satisfactory) or "U" (unsatisfactory).

Requirements for enrollment in student teaching are:

1. Application filed during the semester before student teaching.

2. Full admittance to and good standing in the Teacher Education Program one semester before student teaching.
3. Classification as a senior with a minimum grade point average of 2.5.
4. Completion of all prerequisite professional education courses.
5. Minimum grade of "C" (2.0) in University General Education Program courses, each required professional education course, and each course in the major.
6. Students must obtain satisfactory scores in Principle of Learning and Teaching and Specialty Area Examinations of the PRAXIS II, according to the criteria established by the Tennessee State Board of Education, before student teaching. PRAXIS II examinations are required for teacher licensure in Tennessee.

## Graduation

To be recommended for graduation and licensure, students must complete the requirements listed below:

1. Minimum of 132 semester hours, including at least 45 hours of upper division courses and a minimum grade point average of 2.5 in 45-51 hours in liberal content courses.
2. Overall minimum GPA of 2.5.
3. A minimum GPA of 2.5 in all credits earned at The University of Memphis, excluding all credit transferred from other institutions.
4. Minimum grade of "C" (2.0) in each required professional education course and each course in the major.

**NOTE:** Any courses taken in excess of those needed to fulfill the requirements of the major are considered to be general electives and are included only in the calculation of the overall GPA. In those areas where students are required to take elective courses, the student, in consultation with and approval of the major advisor, designates where the elective courses are to be applied.

## MAJORS

In addition to completing the degree requirements listed above for teacher licensure, B.S.Ed., students must complete requirements for the Human Development and Learning, Integrative Studies, Physical Education Teacher Education, or Special Education major. Following the requirements for these majors are the requirements for the non-licensure degree and majors offered through other departments in the college.

## Careers in Related Occupational and Professional Areas

Career options are available in related occupational and professional areas of Dietetics, Family and Consumer Science Education, Food Systems Management, Fashion Merchandising, and Home Furnishings Merchandising through the Department of Consumer Science and Education. Students have the opportunity to prepare for careers in Exercise Science and Health Promotion, Physical Education, Leisure Management, and Sport Management through the Department of Human Movement Sciences and Education. A non-licensure degree for business/industry is available through the Instruction and Curriculum Leadership Department. This prepares individuals to become trainers and educational leaders in non-school settings. For additional information consult the College of Education Advisory Services Office or the department chair.

## B.S.Ed. REQUIREMENTS (NON-LICENSURE)

Non-licensure B.S.Ed. programs include the major in Consumer Science and Education which is offered through the Department of Consumer Science and Education and the following majors offered through the Department of Human Movement Sciences and Education: Exercise and Sport Science, and Sport and Leisure Studies. Students may also complete the non-licensure major in the Department of Instruction and Curriculum Leadership: Human Development and Learning, and Integrative Studies: Society Services. Degree requirements for these majors include the following:

## Graduation

In addition to specific course requirements listed below, students must complete the following:

1. Minimum of 132 semester hours of which at least 45 hours must be upper division and at least 45-51 hours in liberal content courses.
2. Overall minimum GPA of 2.0.
3. A minimum GPA of 2.0 in all credits earned at The University of Memphis excluding all credit transferred from other institutions.
4. A minimum GPA of 2.25 in all courses required for fulfilling the completion of the major.
5. For the Exercise and Sport Science, and Sport and Leisure Studies majors, a minimum GPA of 2.5 in the major (including major core, and concentration requirements) is required for fulfilling the completion of the major
6. For the Exercise and Sport Science, and Sport and Leisure Studies majors, a minimum grade of "C" (2.0) in all courses required in the major core and concentration, and a 2.0 average for all guided elective courses.

**NOTE:** Any courses taken in excess of those needed to fulfill the requirements of the major are considered to be general electives and are included only in the calculation of the overall GPA. In those areas where students are required to take elective courses, the student in consultation with and approval of the major advisor, designates where the elective courses are to be applied.

# CONSUMER SCIENCE AND EDUCATION

## Department of Consumer Science and Education

## Consumer Science and Education Major (B.S.Ed.)

### A. University General Education Program (48 - 51 hours)

See page 57 for the University General Education Program requirements. Note the following are specified by the department for this major: *Social Science (Global):* all students in the major take CSED/SOCI 2101; students in Dietetics concentration take *Historical/Philosophical Heritage: Post 1500*: POLS 1102; *non-Global*: PSYC 1200; *Natural Science* : CHEM 1110/1111, 1120/1121; students in Food Systems Management take *non-Global*: ECON 2120; *Natural Science:* CHEM 1010/1011, 1020/1021; students in Merchandising take *non-Global*: ECON 2120.

### B. The Major (66 - 85 hours)

1. *Core requirements (18 hours):*
   Completion of CSED 1101, 2104, 2202, 3302 (Same as EDPR 3302), 4106 [W, I], 4300; and one of the following concentrations. Students in all concen-

trations must complete the application for practicum or internships by mid-term of the semester before enrollment for the internships. Students may obtain the form from their major advisor.

2. *Concentrations (48 - 62 hours):*
   a. *Dietetics Concentration (56 hours):* CSED 2302, 3002, 3502, 4102, 4112, 4602, 4712, 4802, 4812; CHEM 3301 (1), 3302 (1), 3311, 3312; BIOL 2010/2011 (4), 2020/2021 (4); MMCS 1230/1231 (4); ACCT 2010; EDPR 4541 [C]; MKTG 3010.
   b. *Family and Consumer Science Education (57+ hours):* CSED 1105, 2302, 3204, 3401, 4405; EDPR 4541 [C]; IDT 3600 or COMP 1200; SPED 2000; 15 hours chosen in consultation with advisor from the following courses CSED 2004, 2005, 4101, 4204, 4213, 4217, 4304, 4314, 4322, 4405, 4602, 4702; in consultation with advisor, 18 hours chosen in the fields of marketing, merchandising, journalism, or in occupational concentration area. Note: Family and Consumer Science Education students interested in obtaining a teacher licensure must submit a formal application to the College of Education Teacher Education Program (TEP). See departmental advisor for details.
   c. *Food Systems Management Concentration (40 hours):* CSED 2302, 3502, 4212, 4332, 4702, 4722; ACCT 2010; ISDS 2710 or EDPR 4541 [C]; ISDS 2749 (1), 2755; MGMT 3110, 4420; MKTG 3010, 3410; FIR 3130.
   d. *Merchandising Concentration (54-57 Hours).* Core (15 hours): CSED 2106, 3206 [C], 4600 (6); IDT 3600; and select 1 or 2 below.
      1. *Fashion* (36 hours): CSED 1105, 2005, 4405, 4705 (6); Marketing Management Minor (21 hours): ACCT 2010, and MKTG 3010, 3012, 3140, 3610. And 6 semester hours chosen by the student from required options in the Marketing Management minor.
      2. *Home Furnishings* (39 hours): CSED 2004, 3204, 4204, 4304, 4314, 4405, 4804 (6); Business Administration Core (18 hours): ACCT 2010; MKTG 3010, and 9 hours in MKTG selected in consultation with advisor.

      All merchandising students must see CSED Advisor to:
      1. Consult on selection of required electives.
      2. Receive approval on completion of major subject areas prior to the final professional semester (CSED 4600, 4705, or 4804).
      3. Complete application for CSED 4600 prior to study day of the semester preceding the final professional semester.
      4. Enroll in 1 semester in Fashion Institute of Technology in New York City (optional).

### C. Electives (0 - 18 hours)

Electives may be chosen to bring the total number of hours to 132 or 125 hours for the Dietetics concentration.

### D. Computer Literacy

This requirement is fulfilled by completing IDT 3600 or its equivalent. Consult advisor.

## Typical 4-Year Dietetics Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH* | 3 | MATH* | 3 |
| Fine Arts Heritage* | 3 | PSYC 1200 | 3 |
| HMSE 1100 | 2 | CSED 1101 | 3 |
| CHEM 1110/1111 | 4 | | |
| POLS 1102 | 3 | CHEM 1120/1121 | 4 |
| Semester Totals | 18 hrs | | 16 hrs |
| **Sophomore Year** | | | |
| Literary Heritage* | 3 | COMM 2381 | 3 |
| American Heritage* | 3 | CSED/SOCI 2101 | 3 |
| BIOL 2010/2011 | 4 | BIOL 2020/2021 | 4 |
| PHED* | 2 | | |
| CSED 2302 | 3 | CSED 2104 | 3 |
| CSED 2202 | 3 | Hist/Phil Heritage* | 3 |
| Semester Totals | 18 hrs | | 16 hrs |
| **Junior Year** | | | |
| CSED 3302 | 3 | CSED 3502 | 3 |
| CSED 4300 | 3 | American Heritage* | 3 |
| CHEM 3311/3301 | 4 | CHEM 3312/3302 | 4 |
| ACCT 2010 | 3 | MMCS 1230/ | 4 |
| CSED 3002 | 3 | MKTG 3010 | 3 |
| Semester Totals | 16 hrs | | 17 hrs |
| **Senior Year** | | | |
| CSED 4106 | 3 | CSED 4112 | 3 |
| CSED 4102 | 3 | CSED 4712 | 3 |
| CSED 4802 | 3 | CSED 4602 | 3 |
| CSED 4812 | 3 | EDPR 4541 | 3 |
| Semester Totals | 12 hrs | | 12 hrs |

Total Hours: 125

Total Hours Required for Graduation: 125

*Must satisfy University General Education Program Requirement

## Typical 4-Year Family and Consumer Science Education Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH * | 3 | MATH* | 3 |
| Fine Arts Heritage* | 3 | Natural Science* | 4 |
| HMSE 1100 | 2 | CSED 1101 | 3 |
| Natural Science* | 4 | Hist/Phil Heritage* | 3 |
| Hist/Phil Heritage* | 3 | PHED* | 2 |
| Semester Totals | 18 hrs | | 18 hrs |
| **Sophomore Year** | | | |
| Literary Heritage* | 3 | COMM 2381 | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| CSED 1105 | 3 | CSED 2202 | 3 |
| CSED 2104 | 3 | CSED 2101 | 3 |
| Social Science* | 3 | CSED 3302 | 3 |
| SPED 2000 | 3 | Elective | 3 |
| Semester Totals | 18 hrs | | 18 hrs |
| **Junior Year** | | | |
| CSED 2302 | 3 | CSED 3204 | 3 |
| CSED 4300 | 3 | CSED 3401 | 3 |
| Concentration Selective | 3 | CSED 4405 | 3 |
| IDT 3600 | 3 | Concentration Selective | 3 |
| CSED 4304 | 3 | Elective | 3 |
| Semester Totals | 15 hrs | | 15 hrs |
| **Senior Year** | | | |
| CSED 4106 | 3 | CSED 4217 | 3 |
| EDPR 4541 | 3 | Elective | 3 |
| Elective | 3 | Concentration Selective | 3 |
| CSED 4213 | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 15 | | 15 |

Total Hours: 132

Total Hours Required for Graduation: 132

*Must satisfy University General Education Program Requirement

## Typical 4-Year Fashion Merchandising Concentration Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1410 | 3 | MATH 1420 | 3 |
| Fine Arts Heritage* | 3 | CSED 2005 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 15 hrs | | 15 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| Literary Heritage* | 3 | COMM 2381 | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| CSED/SOCI 2101 | 3 | ECON 2120 | 3 |
| CSED 1101 | 3 | CSED 2104 | 3 |
| CSED 1105 | 3 | ACCT 2010 | 3 |
| CSED 2202 | 3 | | |
| Semester Totals | 18 hrs | | 15 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| American Heritage* | 3 | American Heritage* | 3 |
| CSED 2106 | 3 | MKTG 3012 | 3 |
| MKTG 3010 | 3 | MKTG 3610 | 3 |
| CSED 3302 | 3 | IDT 3600 | 3 |
| CSED 4300 | 3 | CSED 3206 | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 18 hrs | | 18 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| CSED 4106 | 3 | CSED 4600 | 6 |
| MKTG 3140 | 3 | CSED 4705 | 6 |
| MKTG | 3 | Elective | 3 |
| MKTG | 3 | | |
| CSED 4405 | 3 | | |
| Elective | 3 | | |
| Semester Totals | 18 | | 15 |

Total Hours: 132

Total Hours Required for Graduation: 132

*Must satisfy University General Education Program Requirement

## Typical 4-Year Food Systems Management Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1410 | 3 | MATH 1420 | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| CSED 1101 | 3 | American Heritage* | 3 |
| CSED 2104 | 3 | Fine Arts Heritage* | 3 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 17 hrs | | 17 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| CHEM 1010/1011 | 4 | CHEM 1020/1021 | 4 |
| Literary Heritage* | 3 | COMM 2381 | 3 |
| American Heritage* | 3 | ECON 2120 | 3 |
| CSED 2202 | 3 | ACCT 2010 | 3 |
| CSED 2302 | 3 | ISDS 2710 | 3 |
| Semester Totals | 16 hrs | | 16 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| CSED 3302 | 3 | Elective | 3 |
| CSED/SOCI 2101 | 3 | CSED 3502 | 3 |
| MKTG 3010 | 3 | MKTG 3410 | 3 |
| ISDS 2749 | 3 | FIR 3130 | 3 |
| MGMT 3110 | 3 | ISDS 2755 | 3 |
| Semester Totals | 15 hrs | | 15 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| CSED 4106 | 3 | CSED 4722 | 3 |
| MGMT 4420 | 3 | CSED 4322 | 3 |
| CSED 4702 | 3 | MGMT 4420 | 3 |
| CSED 4300 | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 18 hrs | | 18 hrs |

Total Hours: 132

Total Hours Required for Graduation: 132

*Must satisfy University General Education Program Requirement

## Typical 4-Year Home Furnishings Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1410 | 3 | MATH 1420 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| CSED 1101 | 3 | CSED 2104 | 3 |
| | | PHED* | 2 |
| Semester Totals | 16 hrs | | 18 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| CSED 2004 | 3 | CSED 2202 | 3 |
| Literary Heritage* | 3 | COMM 2381 | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| CSED/SOCI 2101 | 3 | ECON 2120 | 3 |
| Fine Arts Heritage* | 3 | HMSE 1100 | 2 |
| | | IDT 3600 | 3 |
| Semester Totals | 15 hrs | | 17 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| CSED 3302 | 3 | CSED 3206 | 3 |
| ACCT 2010 | 3 | CSED 3204 | 3 |
| CSED 2106 | 3 | CSED 4314 | 3 |
| CSED 4304 | 3 | CSED 4204 | 3 |
| MKTG 3010 | 3 | CSED 4405 | 3 |
| MKTG elective | 3 | MKTG elective | 3 |
| Semester Totals | 18 hrs | | 18 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| CSED 4106 | 3 | CSED 4600 | 6 |
| MKTG elective | 3 | CSED 4804 | 6 |
| CSED 4300 | 3 | | |
| Elective | 3 | | |
| Elective | 3 | | |
| Elective | 3 | | |
| Semester Totals | 18 hrs | | 12 hrs |

Total Hours: 132

Total Hours for Graduation: 132

*Must satisfy University General Education Program Requirement

# EXERCISE AND SPORT SCIENCE

## Department of Human Movement Sciences and Education

## Exercise and Sport Science Major (B.S.Ed.)

### A. University General Education Program (48 - 51 hours)

See page 57 for the University General Education Program requirements. Note the following are specified by the department for this major: Social Science (non-Global): PSYC 1200; Fitness and Wellness (Activity): PHED 1713 or any other higher level swimming course; Natural Science (8 credit hours as a 2-lecture/lab sequence): BIOL/MMCS 1110/1111, BIOL 1120/1121 or CHEM 1010/1011, 1020/1021, 1110/1111, 1120/1121 or PHYS 2010/2011, 2020/2021.

### B. Related Studies (8 hours)

Minimum grade of "C-" required for the following courses: BIOL 2010/2011 and 2020/2021.

### C. The Major (56 hours)

Minimum grade of "C-" required in all major courses; SLS 3005 [C], and either SLS 3650 or 4205 or 4500; EXSS 3050, 3405, 3505, 3506 (1), 3603, 3703, 3803, 3450 [W], 4000 (4), 4003, 4010, 4015, 4603, 4605; HMSE 4999 [I].

### D. Guided Electives (6-9 hours) selected in consultation with advisor from the following courses to bring the total number of credit hours to 121:

BIOL/MMCS 1010/1011, BIOL/MMCS 1110/1111; BIOL 1020/1021, 1120/1121, 3730; CHEM 1110/1111, 1120/1121, 3311, 3312, 4511, 4512; COUN 4611, 4621, 4781; EDPR 2111; EXSS 3502, 3853, 4305, 4406, 4705; FIR 3011; MGMT 1010; MKTG 3010; MMCS 3130; SLS 3105, 3406, 3600, 3605, 3650, 4005, 4105, 4125, 4205, 4500; PHYS 2010/2011, 2020/2021, 2110/2111, 2120/2121, 3040.

### E. Computer Literacy

This requirement is fulfilled by completing SLS 3005, or its equivalent. Consult advisor.

In some of the above courses, variable hours of supervised laboratory/field experience will be required.

## Typical 4-Year Exercise & Sport Science Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| CHEM 1110/1111 | 4 | CHEM1120/1121 | 4 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1410 | 3 | MATH 1420 | 3 |
| HIST 1110 | 3 | HIST 1120 | 3 |
| PSYC 1200 | 3 | HMSE 1100 | 2 |
| | | PHED 1713 | 2 |
| Semester Totals | 16 hrs | | 17 hrs |
| **Sophomore Year** | | | |
| BIOL 2010/2011 | 4 | BIOL 2020/2021 | 4 |
| Literary Heritage* | 3 | COMM 2381 | 3 |
| COMM 1851 | 3 | American Heritage* | 3 |
| American Heritage* | 3 | ANTH 1200 | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 16 hrs | | 16 hrs |
| **Junior Year** | | | |
| EXSS 3050 | 3 | EXSS 3603 | 3 |
| EXSS 3405 | 3 | EXSS 3703 | 3 |
| EXSS 3803 | 3 | EXSS 3505 | 3 |
| SLS 3005 | 3 | EXSS 3506 | 1 |
| SLS Elective[1] | 3 | EXSS 3450 | 3 |
| | | EXSS 4603 | 3 |
| Semester Totals | 15 hrs | | 16 hrs |
| **Senior Year** | | | |
| EXSS 4000 | 4 | EXSS 4605 | 9 |
| EXSS 4003 | 3 | HMSE 4999 | 3 |
| EXSS 4010 | 3 | | |
| EXSS 4015 | 3 | | |
| Semester Totals | 13 hrs | | 12 hrs |

Total Hours: 121

Total Hours for Graduation: 121

*Must satisfy University General Education Program Requirement

[1]Select one of the following: SLS 3650, 4205, or 4500.

# HUMAN DEVELOPMENT AND LEARNING

## Department of Instruction and Curriculum Leadership

## Human Development and Learning Major (B.S.Ed.)

Successful completion of B.S.Ed. requirements with a major in Human Development and Learning will qualify a person to apply for licensure in Early Childhood Education (PreK-4). This major is also available to students who are not seeking licensure in which case guided electives will be chosen with faculty advisor approval in lieu of the Professional Semester.

### A. University General Education Program (48 - 51 hours)

See page 57 for the University General Education Program requirements.

NOTE: The following University General Education Program requirements are specified by the department for this major: *Historical/Philosophical Heritage (6 hours) Pre-1500:* Choose either CLAS 2481, or HIST 1110; *Post-1500*: PHIL 1102; *American Heritage (6 hours)*: Choose either HIST 2010, 2020, 2030, 3863, plus one other course from the following: HIST 4851, 4881; ANTH 3282; GEOG 3401; SOCI 3422; *Social Science (6 hours)*: GEOG 1301 or 1401; and POLS 1100; *Natural Science (8 hours)* Choose one of following 2-part sequence of course in Biology: BIOL/MMCS 1010/1011, and BIOL 1020/1021; *Physical*: CHEM 1010/1011 and CHEM 1020/1021; PHYS 1001/1010 and PHYS 1002/1020; *Earth*: GEOG 1010/1011 and GEOG 1020/1021, or GEOL 1040-1103; *Fitness and Wellness (4 hours)*: HMSE 1100; PHED 1811.

### B. Additional General Education Courses for the B.S.Ed. Degree (9 hours):

SOCI 1111; 2 Natural Sciences courses, one from each area not covered in the above 8 hour sequence: Biology, Earth Science (GEOG or GEOL), Physical Science (CHEM or PHYS).

### C. Related Liberal Studies (9 hours):

EDPR 2111; LEAD 2010; EXSS 3306.

### D. The Major (33 hours)

1. *Core (24 hours):* EDPR 4301; ECED 3555, 4510, 4540; SPED 2000, 4900; CCFA 3001; IDT 3600.
2. *Select one course from each of the following three areas:* Race and Ethnicity: SOCI 3401, 3422, 4420, or 4442 [W]; Family and Culture: ANTH 3511, 4411; HIST 4831, 4863; or SOCI 3831; Gender: SOCI 3432 or 4460.

### E. Professional Education (33 hours)

1. *Early Childhood Education* (Grades PreK-4 Licensure): ICL 3000, 4800 [I]; ICL 4902 and 4901 or 4903 (9 hours); ELED 4240; ECED 4500, 4515, 4520, 4525, 4530.
2. *Early Childhood Education* (Grades PreK-4 Non-Licensure): ICL 3000, ELED 4240, ECED 4500, 4515, 4520, 4525, 4530, and additional guided electives to complete 33 hours of Professional Education requirement.

### F. Computer Literacy

This requirement is fulfilled by taking IDT 3600 or its equivalent.

## Typical 4-Year Human Development and Learning: PreK-4 Teacher Licensure Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1410 or 1830 | 3 | MATH 1420 | 3 |
| Natural Science* | 4 | EDPR 2111 | 3 |
| SOCI 1111 | 3 | Natural Science* | 4 |
| GEOG 1301 or 1401 | 3 | LEAD 2010 | 3 |
| PHIL 1102 | 3 | Fine Arts Heritage* | 3 |
| Semester Totals | 19 hrs | | 19 hrs |
| **Sophomore Year** | | | |
| Literary Heritage* | 3 | ECED 3555 | 3 |
| EDPR 4301 | 3 | Natural Science* | 4 |
| Natural Science* | 4 | American Heritage | 3 |
| COMM 2381 | 3 | IDT 3600 | 3 |
| American Heritage* | 3 | POLS 1100 | 3 |
| SPED 2000 | 3 | PHED 1811 | 2 |
| Semester Totals | 19 hrs | | 18 hrs |
| **Junior Year** | | | |
| ECED 4540 | 3 | ECED 4500 | 3 |
| ICL 3000 | 3 | SPED 4900 | 3 |
| HIST 1110 or CLAS 2481 | 3 | Gender selective | 3 |
| ECED 4515 | 3 | ECED 4520 | 3 |
| ECED 4510 | 3 | ECED 4525 | 1 |
| HMSE 1100 | 2 | CCFA 3001 | 3 |
| Semester Totals | 17 hrs | | 16 hrs |
| **Senior Year** | | | |
| ELED 4240 | 3 | ICL 4902 and | |
| EXSS 3306 | 3 | either ICL 4901 or 4903 | 9 |
| ECED 4525 | 2 | ICL 4800 | 3 |
| Family & Culture Selective | 3 | | |
| ECED 4530 | 3 | | |
| Race & Ethnicity Selective | 3 | | |
| Semester Totals | 17 hrs | | 12 hrs |

Total Hours: 132-135

Total Hours Required for Graduation: 132

*Must satisfy University General Education Program Requirement

# INTEGRATIVE STUDIES

## Department of Instruction and Curriculum Leadership

## Integrative Studies (B.S.Ed.)

### A. University General Education Program (51 hours)

See page 57 for the University General Education Program requirements.

NOTE: The following are specified by the department for this major: *Mathematics (6 hours):* MATH 1410 and 1420; *Fine Arts (3 hours):* Choose from ART 1030, MUS 1030, or THEA 1030; *Historical/Philosophical Heritage (6 hour)] Pre-1500:* Choose either CLAS 2481, or HIST 1110; *Post-1500:* PHIL 1102; *American Heritage (6 hours):* HIST 2010 and either HIST 2020 or one of HIST 2030, 3863, 4851, 4881; ANTH 3282; *Social Science (6 hours):* Choose either GEOG 1301 or 1401, and POLS 1100; *Natural Science (8 hours):* Choose one of following 2-part sequence of course Biology: BIOL/MMCS 1010/1011 and BIOL 1020/1021; *Physical:* PHYS 1001/1010 and PHYS 1002/1102; *Chemistry:* CHEM 1010/1011 and CHEM 1020/1021: *Earth:* GEOG 1010/1011 and GEOG 1020/1021, or GEOL 1040-1103; *Fitness and Wellness (4 hours):* HMSE 1100 and EXSS 3604.

### B. Additional General Education Courses for the B.S.Ed. Degree (6 hours):

PSYC 1200 and SOCI 1111.

### C. Related Liberal Studies (9 hours):

EDPR 2111; EXSS 3306; LEAD 2010.

### D. The Major (21 hours):

ENGL 3500 and ENGL 3401; MATH 2000; IDT 3600; SPED 2000; EDPR 3121; ICL 4001.

### E. Guided Electives (15 hours):

1. Select any 2 Science courses from two areas not taken as the University General Education Program science sequence: BIOL/MMCS 1010/1011 or BIOL 1020/1021; CHEM 1010/1011 or CHEM 1020/1021; PHYS 1010 or 1020; GEOG 1010 or 1020.
2. Select one Fine Arts course from CCFA 3001, MUHL 4601, or THEA 4503.
3. Select one Social Science course from HIST 4871, ANTH 3511, HIST 4863, or SOCI 4631.
4. Select one Social Science course from HIST 4831, SOCI 3422, SOCI 4442, or ANTH 4411.

### F. Professional Education (30 hours)

Choose one concentration from the following;

1. *Early and Middle Grades* (Grades K-8 Licensure):
   ELED 4240 and ELED 4241; 4 courses are to be taken concurrently with 50 clock hours of active clinical experience: ELED 4351, 4352, 4353, 4354; ICL 4901, 4800 and 4904.
2. *Society Services* (Non-Licensure):
   ICL 4800; Choose 6 hours from the following: ECED 3555, 4515; EDPR 3300, 3301; PSYC 3103; CSED 3401. Choose 6 hours from the following: EDPR 4541; SWRK 2911; SOCI 4842; CSED 4101; COUN 4621. Choose 6 hours from the following: SLS 3103, 3205, 3305, 4105; MGMT 3110, 3215; MKTG 3010, 4230. Choose 9 hours from the following: SOCI 3401, 3422, 3432, 3831, 4420, 4442, 4460; ANTH 3511, 4411; HIST 4831, 4863. Minimum 20 clock hours of clinical experience related to designated field of preparation recommended.

### G. Computer Literacy

This requirement is fulfilled by taking IDT 3600 or its equivalent.

## Typical 4-Year Integrative Studies K-8 Licensure Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1410 | 3 | COMM 2381 | 3 |
| POLS 1100 | 3 | SOCI 1111 | 3 |
| Natural Science selective | 3 | Natural Science selective | 3 |
| PSYC 1200 | 3 | MATH 1420 | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| Semester Totals | 18 hrs | | 18 hrs |
| **Sophomore Year** | | | |
| Literary Heritage* | 3 | PHIL 1102 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| HMSE 1100 | 2 | EXSS 3604 | 2 |
| LEAD 2010 | 3 | IDT 3600 | 3 |
| EDPR 2111 | 3 | Hist/Phil | 3 |
| SPED 2000 | 3 | Social Science | 3 |
| Semester Totals | 18 hrs | | 18 hrs |
| **Junior Year** | | | |
| ELED 4240 | 3 | ELED 4241 | 3 |
| ICL 4001 | 3 | Fine Arts selective | 3 |
| SOCI 4442 | 3 | ENGL 3500 | 3 |
| ENGL 3401 | 3 | MATH 2000 | 3 |
| History selective | 3 | EDPR 3121 | 3 |
| Fine Arts Heritage* | 3 | EXSS 3306 | 3 |
| Semester Totals | 18 hrs | | 18 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| ELED 4351 | 4 | ICL 4904 | 6 |
| ELED 4352 | 4 | ICL 4901 | 3 |
| ELED 4353 | 2 | ICL 4800 | 3 |
| ELED 4354 | 2 | | |
| Semester Totals | 12 hrs | | 12 hrs |

Total Hours: 132

Total Hours Required for Graduation: 132

*Must satisfy University General Education Program Requirement

## Typical 4-Year Society Services Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1410 | 3 | COMM 2381 | 3 |
| POLS 1100 | 3 | SOCI 1111 | 3 |
| Natural Science selective | 3 | Natural Science selective | 3 |
| PSYC 1200 | 3 | MATH 1420 | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| Semester Totals | 18 hrs | | 18 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| Literary Heritage* | 3 | PHIL 1102 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| HMSE 1100 | 2 | EXSS 3604 | 2 |
| LEAD 2010 | 3 | Fine Arts Heritage* | 3 |
| EDPR 2111 | 3 | HIST 1110 or CLAS 2481 | 3 |
| SPED 2000 | 3 | GEOG 1301 or 1401 | 3 |
| Semester Totals | 18 hrs | | 18 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| Society Services selective | 3 | Society Services selective | 3 |
| ICL 4001 | 3 | Fine Arts selective | 3 |
| Society Services selective | 3 | Society Services selective | 3 |
| ENGL 3401 | 3 | MATH 2000 | 3 |
| Selection A | 3 | EDPR 3121 | 3 |
| Society Services selective | 3 | EXSS 3306 | 3 |
| Semester Totals | 18 hrs | | 18 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| IDT 3600 | 4 | Society Services selective | 3 |
| Society Services selective | 4 | Society Services selective | 3 |
| ELED 3500 | 2 | ICL 4800 | 3 |
| Society Services selective | 2 | Selection B | 3 |
| Semester Totals | 12 hrs | | 12 hrs |

Total Hours: 132

Total Hours Required for Graduation: 132

*Must satisfy University General Education Program Requirement

# PHYSICAL EDUATION TEACHER EDUCATION

## Department of Human Movement Sciences and Education

## Physical Education Teacher Education Major (B.S.Ed.)

### A. University General Education Program (48 - 51 hours)

See page 57 page for the University General Education Program requirements.

Note the following is specified by the department for this major: *Social Science*: PSYC 1200: *Fitness and Wellness (Activity)*: PHED 1713, or any other higher level swimming course.

### B. The Major (78-81 hours)

Successful completion of B.S. Ed. Requirements with a major in Physical Education Teacher Education will qualify a graduate to apply for licensure in Physical Education (K-12). Minimum grade of "C" is required in all major courses: BIOL 2010/2011 (4); BIOL 2020/2021 (4); EDPR 2111; EXSS 3307, 3405, 3703 (4), 3803, 3853; HMSE 2102; IDT 3600; ICL 4909 (9); LEAD 2010; PETE 2001 (2), 2002 (2), 2003 (2), 2006 (2), 2009 (2), 3308 (2), 3800, 3903 [W], 4200 (4), 4300 (4), 4400 (4) [C], 4800 [I]; SPED 2000.

### C. Computer Literacy

This requirement is fulfilled by completing IDT 3600 or its equivalent. Consult department advisor.

## Typical 4-Year Physical Education Teacher Education Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| MATH* | 3 | MATH* | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Fine Arts Heritage* | 3 | HMSE 1100 | 2 |
| Literary Heritage* | 3 | PHED 1713 | 2 |
| Semester Totals | 19 hrs | | 17 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| PETE 2001 | 2 | PETE 2006 | 2 |
| PETE 2009 | 2 | PETE 2002 | 2 |
| PETE 2003 | 3 | EDPR 2111 | 3 |
| BIOL 2010/2011 | 4 | BIOL 2020/2021 | 4 |
| Elective | 3 | LEAD 2010 | 3 |
| PSYC 1200 | 3 | SPED 2000 | 3 |
| Semester Totals | 17 hrs | | 17 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| IDT 3600 | 3 | PETE 4200 | 4 |
| PETE 3903 | 3 | EXSS 3703 | 3 |
| PETE 3800 | 3 | EXSS 3803 | 3 |
| EXSS 3307 | 3 | Social Science* | 3 |
| American Heritage* | 3 | HMSE 2102 | 3 |
| Semester Totals | 15 hrs | | 16 hrs |

**Summer**

| | |
|---|---|
| PETE 3308 | 2 |
| EXSS 3853 | 3 |
| Semester Total | 5 hrs |

| | | | |
|---|---|---|---|
| **Senior Year** | | | |
| American Heritage* | 3 | ICL 4909 | 9 |
| PETE 4300 | 4 | PETE 4800 | 3 |
| PETE 4400 | 4 | | |
| EXSS 3405 | 3 | | |
| COMM 2381 | 3 | | |
| Semester Totals | 17 hrs | | 12 hrs |

Total Hours: 135

Total Hours Required for Graduation: 135

# SPECIAL EDUCATION

## Department of Instruction and Curriculum Leadership

Successful completion of B.S.Ed. requirements with a major in Special Education will qualify a candidate to apply for licensure in Special Education, Modified (K-12) and an additional licensure in either ELED (K-8) or Comprehensive (K-12), depending on the career path of the candidate. All candidates must complete requirements for one of the above combinations and may be able to satisfy requirements for all three of the licensure areas. Consult an advisor in the College of Education.

This major is also available to students who are not seeking licensure in which case guided electives will be chosen with advisor approval in lieu of the Professional Semester and additional related licensure area. These electives will reflect a cohesive, non-school specialization with a full semester internship in a non-school setting.

## Special Education Major (B.S.Ed.)

### A. University General Education Program (48 - 51 hours)

See page 57 for the University General Education Program requirements.

The following University General Education Program requirements are specified for this major:

*Mathematics:* MATH 1410-1420 is recommended; *Social Science:* CSED/SOCI 2101 is recommended; PSYC 1200 is required.

### B. Related Liberal Studies (15 hours):

EDPR 2111; IDT 3600; HMSE 2102; LEAD 2010.

### C. The Major (36 hours):

Major core for Modified (K-12) licensure and non-licensure:

SPED 2000, 3201*, 3401*, 3501*, 3802 (corequisite), 3803 (corequisite), 4601*, 4900; ECED 4500; ELED 4240 [W], 4241; ENGL 4531.

*30 hours practicum required in each Corequisites: SPED 3800/3801/3803.

### D. Guided Electives (12 hours):

All candidates with a major in Special Education must choose one of the following career paths to complete requirements for an additional related licensure area or a specialty area (non-licensure only):

1. Comprehensive (K-12): preparation of special education teacher for general and independence curriculum: SPED 4000/4001 (corequisites), 4513; ELED 3251 [C].
2. Elementary (K-8): preparation of special education teacher for general curriculum: ELED 4351/4352 [C]/4353/4354 (corequisites).
3. Non-Licensure Specialty Area: electives that reflect a cohesive, non-school specialization chosen with advisor approval.

### E. Professional Education (18-19 hours):

1. Modified licensure (K-12)
   a. Modified methods/practicum (corequisites): SPED 3800/3801
   b. Professional Semester: ICL 4800 [I]; enhanced student teaching in Modified (K-12) ICL 4905 (5); and either Comprehensive (K-12) ICL 4906 (3), and ICL 4904 or 4907 (2); or Elementary (K-8) ICL 4904 (4) and ICL 4901 (1).
2. Non-Licensure Specialty Area: ICL 4800 [I], EDSV 4950 (9) full semester non-school internship.

### F. Computer Literacy

This requirement is fulfilled by taking IDT 3600 or its equivalent.

*NOTE: SPED 3800, 3801, 3802, and 3803 must be taken as Corequisites. The Prerequisites for this sequence are admission to TEP and SPED 2000, 3201, 3401, 3501, 3601; ELED 3251, 4242.

## Typical 4-Year Special Education K-12 Licensure Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH* | 3 | COMM 2381 | 3 |
| Fine Arts Heritage* | 3 | HMSE 1100 | 2 |
| American Heritage* | 3 | Natural Science* | 4 |
| Natural Science* | 4 | American Heritage* | 3 |
| PSYC 1200 | 3 | MATH* | 3 |
| Semester Totals | 19 hrs | | 18 hrs |
| **Sophomore Year** | | | |
| Literary Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Hist/Phil Heritage* | 3 | Social Science* | 3 |
| SPED 2000 | 3 | ICL 3000 | 3 |
| PHED | 2 | SPED 3501 | 3 |
| LEAD 2010 | 3 | HMSE 2102 | 3 |
| EDPR 2111 | 3 | SPED 3201 | 3 |
| Semester Totals | 17 hrs | | 18 hrs |
| **Junior Year** | | | |
| EDPR 3302 | 3 | Guided Elective 1 | 3 |
| SPED 3401 | 3 | SPED 3800 | 3 |
| ELED 3251 | 3 | SPED 3801 | 3 |
| ELED 4242 | 6 | SPED 3802 | 3 |
| IDT 3600 | 3 | ELED 3803 | 3 |
| Semester Totals | 18 hrs | | 15 hrs |
| **Senior Year** | | | |
| Guided Elective2 | 3 | ICL 4800 | 3 |
| SPED 3601 | 3 | ICL 4905 | 4 |
| SPED 4000 | 3 | ICL 4906 | 4 |
| SPED 4001 | 3 | ICL 4904 or 4907 | 2 |
| SPED 4900 | 3 | | |
| Semester Totals | 15 hrs | | 13 hrs |

Total Hours: 133

Total Hours Required for Graduation: 133

*Must satisfy University General Education Program Requirement

# SPORT AND LEISURE STUDIES

## Department of Human Movement Sciences and Education

## Sport and Leisure Studies Major (B.S.Ed.)

### A. University General Education Program (48 - 51 hours)

See page 57 page for the University General Education Program requirements.

Social Science: CSED/SOCI 2101 is recommended; ECON 2110 is required.

### B. The Major (75 - 78 hours)

1. *Core requirements (48 - 51 hours).* (Minimum grade of "C" required in all major core and concentration courses); HMSE 4999 [I]; JOUR 3400; MGMT 3110; MKTG 3010; SLS 2105, 2605, 3005 [C], 3105, 3204, 3205, 3605, 4205, 4500, 4605 (9-12); plus one of the following concentrations and electives to bring the total for the degree to at least 126 semester hours.
2. *Concentration (15 hours):*
   a. *Leisure Management (15 hours).* SLS 3103, 3202, 3305, 3905, 4105; plus 6-9 hours of guided electives selected in consultation with advisor; 3-6 hours of general electives; and satisfactory completion of a Professional Development Portfolio.

b. *Sport Management (15 hours).* SLS 3600, 3650, 4135, 4145, 4155; plus 6-9 hours of guided electives selected in consultation with advisor; 3-6 hours of general electives; and satisfactory completion of a Professional Development Portfolio.

**C. Electives (0 - 12 hours)**

Electives may be chosen to bring the total number of hours to 126.

**D. Computer Literacy**

This requirement is fulfilled by completing IDT 3600 or its equivalent. Consult department advisor.

## Typical 4-Year Leisure Management Concentration Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| MATH* | 3 | MATH* | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Semester Totals | 13 hrs | | 13 hrs |
| **Sophomore Year** | | | |
| Literary Heritage* | 3 | PHED* | 2 |
| COMM 2381 | 3 | Fine Arts Heritage* | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| ECON 2110 | 3 | SLS 2105 | 3 |
| HMSE 1100 | 2 | SLS 2605 | 1-3 |
| Semester Totals | 14 hrs | | 12-14 hrs |
| **Junior Year** | | | |
| SLS 2605 | 2 | SLS 3202 | 3 |
| SLS 3005 | 3 | SLS 3204 | 3 |
| SLS 3105 | 3 | SLS 4205 | 3 |
| MKTG 3010 | 3 | JOUR 3400 | 3 |
| MGMT 3110 | 3 | Social Science* | 3 |
| SLS 3305 | 3 | | |
| Semester Totals | 17 hrs | | 15 hrs |
| **Senior Year** | | | |
| SLS 3103 | 3 | SLS 3905 | 3 |
| SLS 3205 | 3 | SLS 4105 | 3 |
| SLS 3605 | 3 | Guided elective | 3 |
| Guided elective | 3 | Guided elective | 3 |
| General elective | 3 | General elective | 3 |
| SLS 4500 | 3 | | |
| Semester Totals | 18 hrs | | 15 hrs |
| **Summer** | | | |
| SLS 4605 | 9 | | |
| HMSE 4999 | 3 | | |
| Summer Total | 12 hrs | | |

Total Hours: 129

Total Hours Required for Graduation: 126

*Must satisfy University General Education Program Requirement

## Typical 4-Year Sport Management Concentration Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| MATH* | 3 | MATH* | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Semester Totals | 13 hrs | | 13 hrs |
| **Sophomore Year** | | | |
| Literary Heritage* | 3 | PHED* | 2 |
| COMM 2381 | 3 | Fine Arts Heritage* | 3 |
| American Heritage* | 3 | American Heritage* | 3 |
| Social Science* | 3 | SLS 2105 | 3 |
| HMSE 1100 | 2 | SLS 2605 | 1 |
| Semester Totals | 14 hrs | | 12 hrs |
| **Junior Year** | | | |
| SLS 2605 | 2 | SLS 3204 | 3 |
| SLS 3005 | 3 | SLS 4205 | 3 |
| SLS 3105 | 3 | SLS 4135 | 3 |
| MKTG 3010 | 3 | JOUR 3400 | 3 |
| MGMT 3110 | 3 | ECON 2110 | 3 |
| Semester Totals | 14 hrs | | 15 hrs |
| **Senior Year** | | | |
| SLS 3205 | 3 | SLS 4145 | 3 |
| SLS 3600 | 3 | SLS 4155 | 3 |
| SLS 3605 | 3 | Guided elective | 3 |
| Guided elective | 3 | Guided elective | 3 |
| General elective | 3 | General elective | 3 |
| SLS 4500 | 3 | SLS 3650 | 3 |
| Semester Totals | 18 hrs | | 18 hrs |
| **Summer** | | | |
| SLS 4605 | 9 | | |
| HMSE 4999 | 3 | | |
| Summer Total | 12 hrs | | |

Total Hours: 129

Total Hours Required for Graduation: 126

*Must satisfy University General Education Program Requirement

# The Herff College of Engineering

RICHARD C. WARDER, JR., Ph.D., P.E., *Dean*
*Room 201-D, Engineering Building*
*(901) 678-2171*
*http://www.engr.memphis.edu/*

| Department | Major | Concentration Within Major | Degree Offered |
|---|---|---|---|
| Civil Engineering | Civil Engineering ** | (1) Construction Engineering<br>(2) Environmental Engineering<br>(3) Foundation Engineering<br>(4) Structural Engineering\<br>(5) Transportation Engineering | Bachelor of Science in Civil Engineering (B.S.C.E.) |
| Electrical and Computer Engineering | Computer Engineering | | Bachelor of Science in Computer Engineering (B.S.C.E.) |
| | Electrical Engineering | (1) Computer Engineering<br>(2) Electrophysics<br>(3) Systems and Signals | Bachelor of Science in Electrical Engineering (B.S.E.E.) |
| Engineering Technology | *Computer Engineering Technology***<br>*Electronics Engineering Technology***<br>Manufacturing Engineering Technology*** | | Bachelor of Science in Engineering Technology (B.S.E.T.) |
| Mechanical Engineering | Mechanical Engineering** | (1) Biomedical Systems<br>(2) Energy Systems<br>(3) Mechanical Systems | Bachelor of Science in Mechanical Engineering (B.S.M.E.) |

* Minor available.

** Note: Accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

*** Note: Accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

Contact: Accreditation Director, Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202 (410)347-7700, Fax (410)625-2238.

Individual program requirements described in *The University of Memphis 2003-2004 Undergraduate Bulletin* are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this *Bulletin*; or consult the *Undergraduate Bulletin* website at: *http://www.people.memphis.edu/~acadafflib/bulletin/bulletin.htmlx* for the latest updates.

## PURPOSES

The mission of the Herff College of Engineering is to provide quality teaching, research, and service programs to the citizens of the state, region and nation. The College provides undergraduate programs in civil, computer, electrical, and mechanical, and in computer, electronics, and manufacturing engineering technology. Graduate programs are offered in all of the disciplines listed above and biomedical engineering. Each curriculum is designed to prepare students for practice of the profession in industry, government, or academic institutions. Considerable effort is directed toward breadth as well as depth to provide programs of highest quality.

## ORGANIZATION

The Herff College of Engineering is organized into the Departments of Biomedical Engineering, Civil Engineering, Electrical and Computer Engineering, Mechanical Engineering, and Engineering Technology. Undergraduate degree programs offered by these departments are listed in the table above.

Freshman students entering the Herff College of Engineering will be advised by the College Academic Advisor, who will assist students with class schedules and facilitate changes of major and other academic needs. After students accumulate an appropriate number of hours, their advising will be transferred to a faculty member in the department of their major.

## DEGREE REQUIREMENTS

Students must satisfy all university, college and departmental degree requirement for the degree desired. University requirements may be found in the "Graduation from the University" section of this *Bulletin*. The College requires that a minimum of 31 of the hours required by the University for residency be taken as upper division hours in course in the Herff College of Engineering. Specific departmental requirements are subject to change and students should consult their advisor regularly to learn of changes that occur.

## ACCELERATED BS/MS PROGRAM IN BIOMEDICAL ENGINEERING

Qualified students are allowed to earn a Bachelor's degree in an approved undergraduate discipline and a Master's degree in Biomedical Engineering (BME) in five years. Students with high school advanced placement credits may require less time. Students will join research teams organized through the Joint Graduate Program in Biomedical Engineering, which is shared by The University of Memphis and The University of Tennessee Health Science Center. Students may apply once they have reached sophomore standing and have completed one semester of course work. In addition to an application form, students must submit one letter of reference and a copy of their transcript to the BME department. Each applicant will be required to complete an interview with a pre-graduate advisor in the BME department. In order to remain in the program past the junior year, students must maintain a minimum GPA of 3.25. Students in their senior year will become eligible to apply for combination senior status, allowing them to take graduate courses in BME. To continue in this program past the B.S., students must submit a "Change of Status" application with Graduate Admissions. Further information may be found at: *http://engr.memphis.edu/threetwo.html*.

# CIVIL ENGINEERING

## Department of Civil Engineering

The Civil Engineering program is designed to equip students with the knowledge and skills required to identify and solve the technical problems of society in a practical and ethical way. The program objectives are to (1) produce civil engineers who can assume technical and managerial leadership roles in the planning, design, construction, operation, and maintenance of our nation's infrastructure; (2) provide lifelong learning opportunities for civil engineering practitioners in the region; and (3) assist local government and industry in the solution of their technical problems while providing practical experience for our students. The Civil Engineering program is greatly enhanced by a diverse student body spanning a wide range of ages, backgrounds, and nationalities.

The Civil Engineering program of study provides an integrated educational experience that combines study in basic and engineering science, the humanities, and the social sciences with practical experience in laboratory experimentation, problem solving, and engineering design. Students may pursue a general course of study or may elect to specialize in water resources or one of the following concentrations; environmental, structural, foundation, transportation, or construction engineering.

GRADUATION: To qualify for the degree of Bachelor of Science in Civil Engineering, a student must satisfy University and College requirements, have a minimum grade of "C" in all civil engineering courses that are applied toward the degree, and complete the course sequence outlined below. For credits transferred from another institution, only those civil engineering courses with a minimum grade of "C" may be applied toward the degree.

COURSE ENROLLMENT: The degree program in Civil Engineering includes a series of engineering science and professional courses taught at the upper division level. These courses are based on a background of communications, physical science, mathematics, and engineering science courses required during the freshman and sophomore years. All of the courses required during the freshman and sophomore years are prerequisites to junior standing in the Department of Civil Engineering. Students shall not enroll in any upper division courses in civil engineering before the semester in which they complete all of the lower division requirements. Exceptions to this policy can be made only by the department chair acting upon the recommendation of the student's advisor.

HONORS PROGRAM: Students are eligible for the honors program in Civil Engineering if they have a minimum overall GPA of 3.25 with a junior or senior standing or have received approval of the departmental honors committee. The honors program in Civil Engineering requires 12 hours of upper division honors courses. Those students who complete the program and the regular B.S.C.E. requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in Civil Engineering." Moreover, the student's diploma and record at The University of Memphis will reflect this accomplishment. Details concerning this program and honors course offerings are available in the Department of Civil Engineering.

## Civil Engineering Major (B.S.C.E.)

### A. University General Education Program (43 hours)

See page 57 for University General Education Program requirements. Note the following requirements are specified for this program: *Oral Communication and Rhetoric:* ENGL 3603 instead of COMM 2381; *Mathematics:* MATH 1910 (students who have not had MATH 1730 or its equivalent must take it before enrolling MATH 1910).

*Natural Science*: PHYS 2110/2111, 2120/2121.

*American Heritage*: waived for B.S.C.E. students who have completed one unit of American history in high school.

### B. College and Degree Requirements (28 hours)

Mathematics: MATH 1920, 2110, and 3120; *Natural Science:* CHEM 1110/1111; and one of the following: CHEM 1120/1121, BIOL/MMCS 1110/1111, GEOL 1040, or GEOL 1103.

*Collateral Courses:* EECE 2201 or MECH 3311; MECH 2308, 2332.

### C. The Major (65 hours)

1. Completion of CIVL 1101, 1112, 2107, 2131, 3103, 3121 **[C]**, 3131 or 4135, 3137, 3140 (4), 3181, 4151 (4), 3161, 3180, 3182 (1), 3322, 3325 (1), 4111, 4193 (1), 4199 **[W, I]**.
2. Twelve hours of civil engineering electives approved by an advisor and selected as follows:
   a. Group 1 Electives: Choose 3 hours from group 1 electives CIVL 4122, 4171, 4172, and an approved upper-division civil, electrical, or mechanical engineering course;
   b. Group 2 Electives: Choose 9 hours from CIVL 4131, 4135 or 3131, 4136, 4140, 4143, 4144, 4149, 4152, 4162, 4163, 4164, 4180, 4190, 4191, and 4900-10.

   A student may select courses from the following concentrations to satisfy civil engineering elective requirements. If the student declares a concentration, a minimum of 9 hours from that concentration area is required.
   1. *Construction Engineering:* CIVL 4164, 4171, 4172, 4191
   2. *Environmental Engineering:* CIVL 4140, 4143, 4144, 4149, 4180, 4191.
   3. *Foundation Engineering:* CIVL 4152, 4171, 4191.
   4. *Structural Engineering:* CIVL 4131, 4135 or 3131, 4136, 4152, 4191, 4122.
   5. *Transportation Engineering:* CIVL 4162, 4163, 4164, 4191.

### D. Computer Literacy

This requirement is fulfilled by completing CIVL 1112 and 2107.

## Typical 4-Year Civil Engineering Sequence

| | | | |
|---|---|---|---|
| | **Freshman Year** | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1910 | 4 | MATH 1920 | 4 |
| CIVL 1101 | 3 | CIVL 1112 | 3 |
| PHED* | 2 | PHYS 2110/2111 | 4 |
| CHEM 1110/1111 | 4 | Physical Science[1]* | 4 |
| Semester Totals | 16 hrs | | 18 hrs |

| | | | |
|---|---|---|---|
| | **Sophomore Year** | | |
| Literary Heritage* | 3 | MECH 2308 | 3 |
| MATH 2110 | 4 | HMSE 1100 | 2 |
| PHYS 2120/2121 | 4 | EECE or MECH[2] | 3 |
| CIVL 2107 | 3 | MATH 3120 | 3 |
| CIVL 2131 | 3 | MECH 2332 | 3 |
| | | Social Science* | 3 |
| Semester Totals | 17 hrs | | 17 hrs |
| | **Junior Year** | | |
| Social Science* | 3 | CIVL 3131or 4135[3] | 3 |
| CIVL 3322/3325 | 4 | CIVL 3161 | 3 |
| CIVL 3180 | 3 | CIVL 3182 | 1 |
| CIVL 3121 [C] | 3 | CIVL 3140 | 4 |
| Hist/Phil Heritage* | 3 | ENGL 3603 | 3 |
| CIVL 3103 | 3 | CIVL 3137 | 3 |
| Semester Totals | 19 hrs | | 17 hrs |
| | **Senior Year** | | |
| CIVL 3181 | 3 | CIVL 4111 | 3 |
| CIVL 4151 | 4 | CIVL 4199 [W, I] | 3 |
| CIVL Elective (Grp 1)[4] | 3 | CIVL Elective (Grp 2)[4] | 3 |
| CIVL Elective (Grp 2)[4] | 3 | CIVL Elective (Grp 2)[4] | 3 |
| Fine Arts Heritage | 3 | Hist/Phil Heritage* | 3 |
| | | CIVL 4193 | 1 |
| Semester Totals | 16 hrs | | 16 hrs |

Total Hours: 136

Total Hours Required for Graduation: 136

*Must satisfy University General Education Program Requirement

1 Select from CHEM 1120/1121, BIOL/MMCS 1110/1111, GEOL 1040, and GEOL 1103

2 Select from EECE 2201 and MECH 3311

3 Either CIVL 3131 or 4135 may be taken as a required course. The other may be taken as a Group 2 elective.

4 Upper division course in civil engineering; advisor's approval required.

# COMPUTER ENGINEERING

## Department of Electrical and Computer Engineering

The primary goal of the Computer Engineering major is to educate engineering professionals with expertise in computer engineering to meet the rapidly increasing needs of industry and government in the West Tennessee and the Mid-South region. The program educational objectives are that Computer Engineering graduates will have a quality added education that: (1) prepares graduates capable of thinking critically as well as analyzing and designing hardware, software, and system-integration aspects of computer-based systems; (2) prepares graduates to succeed in graduate programs in computer engineering, computer science, electrical engineering, or software engineering if pursued. Prepares graduates to succeed in other professional programs such as law, medicine, or business if pursued; (3) prepares graduates to be competent computer engineering professionals, capable of working independently and in teams and undertaking leadership roles in their communities, global society, as well as in the computer and information systems industries.

**HONORS PROGRAM:** Students are eligible for the Honors Program in Computer Engineering if they maintain a minimum GPA of 3.25 with junior or senior standing, or have received approval of the departmental Honors Committee. The Honors Program in Computer Engineering requires 9 hours in computer engineering courses and must include EECE 4999. Those students who complete the program and the regular B.S.C.P. requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in Computer Engineering." Moreover, the student's diploma and record at The University of Memphis will reflect this accomplishment. Details concerning this program and honors course offerings are available in the Department of Electrical and Computer Engineering.

**GRADUATION:** The minimum requirements for the degree of Bachelor of Science in Computer Engineering are given below. The student must satisfy university and college requirements. The student must obtain a minimum grade of "C" in EECE 1202, 1207, 1208, 2201, 2203, 2222; MATH 1910, 1920, 2110, 2701, 3120; CHEM 1110/1111; COMP 2150; PHYS 2110/2111, 2120/2121, or any equivalents to these courses used to satisfy degree requirements. In addition, an average grade of "C" (2.0) must be maintained in all undergraduate EECE courses. No transfer credit with a grade less than "C" may be used to satisfy a requirement for the Bachelor of Science in Computer Engineering.

**MINORS:** Students satisfying the requirements for the Bachelor of Science in Computer Engineering may also satisfy requirements for a minor offered by a department in one of the other colleges. Requirements for a minor are specified by the appropriate college and department. Students should submit application for the minor to the appropriate department chair. Candidates for graduation who satisfy requirements for a minor should file the approved application with the intent-to-graduate cards.

## Computer Engineering Major (B.S.C.P.)

### A. General Education (43 hours)

See page 57 for University General Education Program requirements. Note the following requirements are specified for this program: *Oral Communication and Rhetoric*: ENGL 3603 instead of COMM 2381; *Mathematics*: MATH 1910 (students who have not had MATH 1730 or its equivalent must take it before enrolling MATH 1910); *American Heritage*: waived for B.S.C.P. students who have completed one unit of American history in high school; *Social Science*: ECON 2110 must be taken in addition to 3 hours from the other specified choices; *Natural Science*: PHYS 2110/2111, 2120/2121.

### B. College and Degree Requirements (18 hours)

**Mathematics (14 hours):** MATH 1920, 2110, 2701, and 3120.

**Natural Science (4 hours):** CHEM 1110/1111.

### C. The Major (71 hours)

1. Completion of the following: EECE 1202, 1207, 1208, 2201, 2203, 2222, COMP 2150, 3160, 4270, MECH 3310 or 3311; EECE 3201, 3202[C], 3211, 3213, 3220, 3221[C], 3270, 4235, 4278, 4280 [W,I].
2. Electives: Choose from EECE 3212, 4221, 4222, 4230, 4231, 4232, 4252, 4254, 4272, 4273, 4274,4275, 4276, 4277, 4720, 4730, 4991 (1-3), and 6 hours of Technical Electives.

### D. Computer Literacy

This requirement is fulfilled by completing EECE 1202 and 1207.

## Typical 4-Year Computer Engineering Sequence

| | | | |
|---|---|---|---|
| | **Freshman Year** | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1910 | 4 | MATH 1920 | 4 |
| EECE 1202 | 3 | PHYS 2110 | 3 |
| CHEM 1110 | 3 | PHYS 2111 | 1 |
| CHEM 1111 | 1 | EECE 1207 | 3 |
| HMSE 1100 | 2 | EECE 1208 | 1 |
| | | PHED* | 2 |
| Semester Totals | 16 hrs | | 17 hrs |

| | | | |
|---|---|---|---|
| | **Sophomore Year** | | |
| Literary Heritage* | 3 | Fine Arts Heritage* | 3 |
| MATH 2110 | 4 | MATH 3120 | 3 |
| PHYS 2120 | 3 | EECE 2201 | 3 |
| PHYS 2121 | 1 | EECE 2203 | 1 |
| MATH 2701 | 3 | EECE 2222 | 4 |
| COMP 2150 | 3 | COMP 3160 | 3 |
| Semester Totals | 17 hrs | | 17 hrs |
| | **Junior Year** | | |
| EECE 3201 | 4 | EECE 3202 | 3 |
| EECE 3211 | 3 | ENGL 3603 | 3 |
| EECE 3213 | 1 | EECE 4278 | 3 |
| EECE 3221 | 3 | EECE 3220 | 3 |
| EECE 3270 | 4 | COMP 4270 | 3 |
| Hist/Phil Heritage* | 3 | | |
| Semester Totals | 18 hrs | | 15 hrs |
| | **Senior Year** | | |
| MECH 3310 or 3311 | 3 | EECE 4280 | 3 |
| Social Science* | 3 | ECON 2110 | 3 |
| EECE[1] | 3 | Hist/Phil Heritage* | 3 |
| EECE[1] | 3 | Technical Elective[2] | 3 |
| Technical Elective[2] | 3 | EECE [1] | 3 |
| EECE 4235 | 3 | | |
| Semester Totals | 18 hrs | | 15 hrs |

Total Hours: 133

Total Hours Required for Graduation: 133

*Must satisfy University General Education Program Requirement

1 EECE electives are approved upper division Electrical and Computer Engineering courses. See elective list under the major.

2 Upper division courses in engineering, mathematics, computer science, physics. Approval of department chair required.

# COMPUTER ENGINEERING TECHNOLOGY

## Department of Engineering Technology

This Computer Engineering Technology (CET) program provides a unique blend of courses in electronics, computer hardware, and computer software that emphasizes the analysis and design of microprocessor based computer systems. The CET graduate understands electronic hardware, software, and the interaction between them. CET graduates provide business and industry with qualified professionals who can design, install, maintain, and operate computer systems as well as do programming and systems analysis.

## Computer Engineering Technology Major (B.S.E.T.)

### A. University General Education Program (49 hours)

See page 57 for University General Education Program requirements. Note the following are specified by the department for this program: *Mathematics:* MATH 1910; *Natural Science:* PHYS 2010/ 2011, 2020/2021.

### B. College and Degree Requirements (25 hours)

Technology Core: ENGL 3603; CHEM 1010/1011; MATH 1730; TECH 1010, 1411, 1521, 3044 **[C]**, CETH 4944 **[W, I]**.

### C. The Major (64 hours)

Completion of 64 hours including CETH 1211, 2251, 2261, 3232, 3233, 4234, 4235, 4262, 4272, 4944; EETH 1811, 2820, 2821, 2831; METH 4381, 4462, 4474, and two CETH Electives.

NOTE Substitutions must be approved by the Program Coordinator. Computer Engineering Technology electives include CETH 3241, CETH 3281, CETH 3251, CETH 4242, CETH 4263, and CETH 4281. Elective courses to be selected in consultation with advisor..

### D. Computer Literacy

This requirement is fulfilled by completing CETH 1211 and 3233

### E. Graduation

In addition to meeting University requirements for graduation, the student must also attain a minimum grade of "C" (2.0) in all required MATH, CETH, and EETH courses.

### F. Computer Engineering Technology Minor

Prerequisites must be satisfied before enrolling in the courses for the minor: CETH 1211, 2261, 3232, 3233, 4241, 4262; EETH 1811, 2821.

## Typical 4-Year Computer Engineering Technology Sequence

| | | | |
|---|---|---|---|
| | **Freshman Year** | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| TECH 1010 | 3 | CHEM 1010/1011 | 4 |
| HMSE 1100 | 2 | MATH 1910 | 4 |
| MATH 1730 | 4 | PHED* | 2 |
| TECH 1411 | 1 | CETH 1211 | 3 |
| TECH 1521 | 3 | EETH 1811 | 3 |
| Semester Totals | 16 hrs | | 19 hrs |
| | **Sophomore Year** | | |
| PHYS 2010/2011 | 4 | PHYS 2020/2021 | 4 |
| CETH 2251 | 4 | Literary Heritage* | 3 |
| EETH 2820 | 4 | COMM 2381 | 3 |
| EETH 2821 | 3 | CETH 2261 | 4 |
| TECH 3044 [C] | 4 | EETH 2831 | 3 |
| Semester Totals | 19 hrs | | 17 hrs |
| | **Junior Year** | | |
| ENGL 3603 | 3 | Fine Arts Heritage* | 3 |
| Hist/Phil Heritage* | 3 | Social Science * | 3 |
| Hist/Phil Heritage* | 3 | American Heritage* | 3 |
| American Heritage* | 3 | CETH 3233 | 4 |
| CETH 3232 | 4 | Social Science* | 3 |
| Semester Totals | 16 hrs | | 16 hrs |
| | **Senior Year** | | |
| CETH Elective | 4 | CETH elective | 4 |
| CETH 4234 | 4 | CETH 4235 **[I]** | 4 |
| CETH 4262 | 4 | CETH 4272 | 4 |
| METH 4381 | 3 | METH 4462 **[C]** | 3 |
| METH 4474 | 3 | CETH 4944 **[I, W]** | 3 |
| Semester Totals | 18 hrs | | 18 hrs |

Total Hours: 139

Total Hours Required for Graduation: 138

*Must satisfy University General Education Program Requirement

# ELECTRICAL ENGINEERING

## Department of Electrical and Computer Engineering

The educational objectives of the Electrical Engineering program are consistent with the mission of The University of Memphis. The program is designed to provide students satisfying, robust, and quality education in electrical engineering, leading to professional employment and/or graduate-level education. The program educational objectives are that Electrical Engineering graduates will have a quality added education that: (1) enables them to think critically as well as analyze and design engineering systems; (2) enables them to succeed in graduate programs in engineering, business, medicine, law, or other fields if pursued; and (3) enables them to succeed in employment, working independently and in teams, and undertaking leadership roles in their communities and the global society.

In pursuit of these objectives, students enrolled in Electrical Engineering are offered a curriculum designed to provide a thorough background and understanding of the theoretical and physical principles of electric and magnetic phenomena. The intent of the program is to produce graduates who can apply concepts and techniques of mathematics and physics to a variety of analysis and design applications in electrical engineering. In addition graduates are prepared to communicate their ideas succinctly and clearly in both oral and written presentations.

Laboratory facilities are available for a wide variety of instructional and research activities. Significant laboratory activity is required in the curriculum.

Career opportunities include positions in development and design, research, sales, management, manufacturing, and construction. Some of the technical areas of opportunity are related to computer applications, communications systems, power generation and distribution systems, microwave and antenna systems, automatic control systems, and general instrumentation. An undergraduate student, with the approval of the department chairman, may select some electives that satisfy the course entrance requirements for medical school.

**Honors Program:** Students are eligible for the honors program in Electrical Engineering if they maintain a GPA of 3.25 with junior or senior standing or have received approval of the departmental honors committee. The honors program in electrical engineering requires 9 hours of honors courses in electrical engineering and must include EECE 4999. Those students who complete the program and the regular B.S.E.E. requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in Electrical Engineering." Moreover, the student's diploma and record at The University of Memphis will reflect this accomplishment. Details concerning this program and honors course offerings are available in the Department of Electrical and Computer Engineering.

The Department of Electrical and Computer Engineering offers a Master of Science degree for students who desire advanced study in electrical and computer engineering. The department also offers a concentration for students pursuing the interdepartmental Doctor of Philosophy degree.

Details about the program and the program objectives are available on the departmental home page of the world wide web (http://www.ee.memphis.edu/).

**GRADUATION:** The minimum requirements for the degree of Bachelor of Science in Electrical Engineering are given below. The student must satisfy general university and college requirements. The student must obtain a minimum grade of "C" in EECE 1202, 1207, 2201, 2203, 2222; MATH 1910, 1920, 2110, 3120; CIVL 2131; MECH 2332; CHEM 1110/1111; PHYS 2110/2111, 2120/2121 or any equivalents to these courses used to satisfy degree requirements. In addition, an average grade of "C" (2.0) must be maintained in all undergraduate electrical engineering course work. No transfer credit with a grade less than "C" may be used to satisfy a requirement for the Bachelor of Science in Electrical Engineering.

**MINORS:** Students satisfying the requirements for the Bachelor of Science in Electrical Engineering may also satisfy requirements for a minor offered by a department in one of the other colleges. Requirements for minors are specified by the appropriate college and department. Students should submit application for the minor to the appropriate department chair. Candidates for graduation who satisfy requirements for a minor should file the approved application with the intent-to-graduate cards.

## Electrical Engineering (B.S.E.E.)

### A. University General Education Program (43 hours)

See page 57 for University General Education Program requirements. Note the following requirements are specified for this program: *Oral Communication and Rhetoric:* ENGL 3603 instead of COMM 2381; *Mathematics:* MATH 1910 (students who have not had MATH 1730 or its equivalent must take it before enrolling in MATH 1910); *Social Science*: ECON 2110 must be taken in addition to 3 hours from the other specified choices; *Natural Science*: PHYS 2110/2111, 2120/2121.

*American Heritage*: waived for B.S.E.E. students who have completed one unit of American history in high school.

### B. College and Degree Requirements (27 hours)

*Mathematics (14 hours):* MATH 1920, 2110, and 3120, and one upper division MATH course selected with advisor's approval.

*Natural Science (4 hours):* CHEM 1110/1111.

*Collateral Courses (9 hours):* CIVL 2131: MECH 2332, 3310 or 3311.

### C. The Major (63 hours)

1. Completion of 63 hours including EECE 1202, 1207, 2201 (3), 2203 (1), 2222 (4), 3201 (4), 3202, 3211, 3212 (4), 3213 (1), 3221, 3240 **[C]**, 4201 **[C]**, 4203 (1), 4231, 4280 **[I, W]**; 12 hours of EECE electives approved by advisor.
2. Six hours of technical electives approved by advisor. Students may use elective hours to broaden their base of knowledge or for one of the concentrations below. A minimum of 9 semester hours is required for a concentration. The concentrations are the following:
   a. *Computer Engineering*: EECE 3220, 3270 (4), 4222, 4230, 4272, 4273, 4274, 4275, 4276, 4720, and 4730.
   b. *Electrophysics:* EECE 4241, 4242, and 4243.
   c. *Systems and Signals*: EECE 4202, 4204, 4221 (4), 4232, 4251, 4252, and 4253.

NOTE: Projects I or II, EECE 4991 or 4992 can be taken for up to 6 semester hours credit in any of the areas of concentration.

### D. Computer Literacy

This requirement is fulfilled by completing EECE 1202 and 1207.

## Typical 4-Year Electrical Engineering Sequence

| | | | |
|---|---|---|---|
| | **Freshman Year** | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1910 | 4 | MATH 1920 | 4 |
| EECE 1202 | 3 | EECE 1207 | 3 |
| CHEM 1110/1111 | 4 | PHYS 2110/2111 | 4 |
| HMSE 1100 | 2 | PHED* | 2 |
| Semester Totals | 16 hrs | | 16 hrs |

| | | | |
|---|---|---|---|
| | **Sophomore Year** | | |
| Literary Heritage* | 3 | Fine Arts Heritage* | 3 |
| MATH 2110 | 4 | MATH 3120 | 3 |
| PHYS 2120/2121 | 4 | EECE 2201/2203 | 4 |
| CIVL 2131 | 3 | MECH 2332 | 3 |
| EECE 2222 | 4 | ECON 2110 | 3 |
| Semester Totals | 18 hrs | | 16 hrs |
| | **Junior Year** | | |
| EECE 3201 | 4 | EECE 3202 | 3 |
| EECE 3211, 3213 | 4 | EECE 3212 | 4 |
| EECE 3221 | 3 | MECH 3310 or 3311 | 3 |
| [5]Math Elective | 3 | [1]EECE 3240 [C] | 3 |
| Hist/Phil Heritage* | 3 | Hist/Phil Heritage* | 3 |
| Semester Totals | 17 hrs | | 16 hrs |
| | **Senior Year** | | |
| [4]EECE 4231 | 3 | EECE 4280 [W,I] | 3 |
| EECE 4201/4203 | 4 | [3]EECE Electives | 8 |
| [3]EECE Elective | 4 | [2]Technical Elective | 6 |
| ENGL 3603 | 3 | | |
| Social Science* | 3 | | |
| Semester Totals | 17 hrs | | 17 hrs |

Total Hours: 133

Total Hours Required for Graduation: 133

*Must satisfy University General Education Program Requirement

1 Substitution of EECE 4213 or 4215 may be made with advisor's approval.

2 Upper division courses in engineering, mathematics, physics. Approval of department chair required.

3 Upper division courses in electrical engineering. Courses selected must include sufficient design content. Advisor's approval required.

4 Substitution of EECE 4232 or 4235 may be made with advisor's approval.

5 Upper division courses in mathematics. Approval of department chair required.

# ELECTRONICS ENGINEERING TECHNOLOGY

## Department of Engineering Technology

Electronics Engineering Technology is designed to prepare students for careers in analog and digital communications, manufacturing automation, computer electronics and a host of other areas within the electronics industry. The curriculum is a combination of electronic circuit design and analysis, computer applications and programming, and industrial control methods, coupled with management techniques and strategies that will enable the graduate to design, implement, and manage modern electronic systems.

## Electronics Engineering Technology Major (B.S.E.T.)

### A. University General Education Program (49 hours)

See page 57 for University General Education Program requirements. Note the following are specified by the department for this program: *Mathematics:* MATH 1910; *Natural Science:* PHYS 2010/2011, 2020/2021.

### B. College and Degree Requirements (25 hours)

Technology Core: ENGL 3603; CHEM 1010/1011; MATH 1730; TECH 1010, 1411, 1521, 3044 **[C]**, EETH 4944 **[W, I]**.

### C. The Major (65-68 hours)

Completion of 65-67 hours including EETH 1811, 2820, 2821, 2831, 3811, 3812, 3821, 3822, 3841, 4821, 4823, 4944; CETH 1211, 3232, 3233, 4234; METH 1711, 3440, 4381, and 2 Technical electives (6-8 hours) approved by an advisor.

NOTE: Substitutions must be approved by the Program Coordinator. Computer Engineering Technology electives include CETH 3241, CETH 3281, CETH 3251, CETH 4242, CETH 4263, and CETH 4281. Elective courses to be selected in consultation with advisor.

### D. Computer Literacy

This requirement is fulfilled by completing TECH 1010 and CETH 3233.

### E. Graduation

In addition to satisfying University and College graduation requirements, the student must also attain a minimum grade of "C" (2.0) in all required TECH, EETH, CETH, and METH courses, MATH 1730, MATH 1910, ENGL 3603 and technical electives (also applies to any courses substituted for these courses).

### F. Electronics Engineering Technology Minor

Prerequisites must be satisfied before enrolling in the courses for the minor: EETH 1811, 2821, 2831, 3811, 3821, 3822.

## Typical 4-Year Electronics Engineering Technology Sequence

| | | | |
|---|---|---|---|
| | **Freshman Year** | | |
| Fine Arts Heritage* | 3 | CETH 1211 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1730 | 4 | MATH 1910 | 4 |
| TECH 1010 | 3 | TECH 1411 | 1 |
| TECH 1521 | 3 | METH 1711 | 3 |
| HMSE 1100 | 2 | EETH 1811 | 3 |
| | | PHED* | 2 |
| Semester Totals | 18 hrs | | 19 hrs |
| | **Sophomore Year** | | |
| EETH 2820 | 4 | COMM 2381 | 3 |
| Literary Heritage* | 3 | PHYS 2020/2021 | 4 |
| PHYS 2010/2011 | 4 | EETH 2831 | 3 |
| TECH 3044 [C] | 4 | American Heritage* | 3 |
| EETH 2821 | 3 | CHEM 1010/1011 | 4 |
| Semester Totals | 18 hrs | | 17 hrs |
| | **Junior Year** | | |
| Hist/Phil Heritage* | 3 | Social Science* | 3 |
| American Heritage* | 3 | CETH 3233 | 4 |
| CETH 3232 | 4 | EETH 3812 | 3 |
| EETH 3811 | 3 | EETH 3822 | 4 |
| EETH 3821 | 3 | EETH 3841 | 3 |
| ENGL 3603 | 3 | | |
| Semester Totals | 19 hrs | | 17 hrs |
| | **Senior Year** | | |
| Social Science* | 3 | Hist/Phil Heritage* | 3 |
| CETH 4234 | 4 | EETH 4821 | 4 |
| Technical Elective | 3-4 | METH 3440 | 3 |
| EETH 4823 | 3 | Technical Elective | 3-4 |
| METH 4381 | 3 | EETH 4944 [W, I] | 3 |
| Semester Totals | 16-17 hrs | | 16-17 hrs |

Total Hours: 140-142

Total Hours Required for Graduation: 139

*Must satisfy University General Education Program Requirement

# MANUFACTURING ENGINEERING TECHNOLOGY

## Department of Engineering Technology

Manufacturing Engineering Technology is designed for those individuals interested in careers in the manufacturing, distribution, or service industries. Students will study a combination of technological and mechanical concepts coupled with quantitative management techniques that will enable them to design, control, and manage both traditional and automated industrial systems that utilize complex machinery and computer controlled production systems.

Graduates of this program are employed in the areas of quality assurance, supervision, plant management, manufacturing engineering technology, materials handling, industrial safety, systems planning, process planning, computer integrated manufacturing, technical sales, customer service, and warehouse management.

## Manufacturing Engineering Technology Major (B.S.E.T.)

### A. University General Education Program (49 hours)

See page 57 for University General Education Program requirements. Note the following are specified by the department for this program: *Mathematics:* MATH 1910; *American Heritage:* HIST 2010, 2020; *Natural Science:* PHYS 2010/2011, 2020/2021

### B. College and Degree Requirements (25 hours)

*Technology Core:* ENGL 3603; CHEM 1010/1011; MATH 1730; TECH 1010, 1411, 1521, 3044 **[C]**, METH 4944 **[W, I]**.

### C. The Major (64 hours)

Completion of 64 hours including METH 1711, 3386, 3401, 3408, 3421, 3440, 3462, 3573, 4381, 4460, 4462, 4464, 4466, 4472, 4474, 4476, 4571, 4944; EETH 1811, 2812, 2832.

NOTE: Substitutions must be approved by the Program Coordinator.

### D. Computer Literacy

This requirement is fulfilled by completing TECH 1010 and METH 4472.

### E. Graduation

In addition to satisfying University and College graduation requirements, the student must also attain a minimum grade of "C"(2.0) in all required upper division TECH and METH courses (also applies to any courses substituted for these courses).

### F. Manufacturing Engineering Technology Minor

*Prerequisites must be satisfied before enrolling in the courses for the minor:* TECH 1521; METH 1711, 3421, and 9 additional hours from METH 4460, 4462, 4464, 4466, 4472, 4474, 4476, 4571, 4991.

## Typical 4-Year Manufacturing Engineering Technology Sequence

| | | | |
|---|---|---|---|
| **Freshman Year** | | | |
| Social Science * | 3 | Social Science* | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1730 | 4 | HMSE 1100 | 2 |
| TECH 1411 | 1 | MATH 1910 | 4 |
| TECH 1521 | 3 | TECH 1010 | 3 |
| METH 1711 | 3 | EETH 1811 | 3 |
| Semester Totals | 17 hrs | | 18 hrs |
| **Sophomore Year** | | | |
| Literary Heritage* | 3 | Fine Arts Heritage* | 3 |
| CHEM 1010/1011 | 4 | PHED* | 2 |
| PHYS 2010/2011 | 4 | COMM 2381 | 3 |
| EETH 2812 | 3 | PHYS 2020/2021 | 4 |
| American Heritage* | 3 | EETH 2813 | 3 |
| | | American Heritage* | 3 |
| Semester Totals | 17 hrs | | 18 hrs |
| **Junior Year** | | | |
| ENGL 3603 | 3 | METH 3386 | 3 |
| TECH 3044 **[C]** | 4 | METH 3408 | 4 |
| METH 3401 | 3 | METH 3440 | 3 |
| METH 3421 | 3 | METH 3573 | 3 |
| METH 3462 | 3 | Hist/Phil Heritage* | 3 |
| Semester Totals | 16 hrs | | 16 hrs |
| **Senior Year** | | | |
| Hist/Phil Heritage* | 3 | METH 4462 **[C]** | 3 |
| METH 4381 | 3 | METH 4466 | 3 |
| METH 4460 | 3 | METH 4476 | 3 |
| METH 4464 | 3 | METH 4571 | 3 |
| METH 4472 | 3 | METH 4944 **[W, I]** | 3 |
| METH 4474 | 3 | Technical Elective | 3 |
| Semester Totals | 18 hrs | | 18 hrs |

Total Hours: 138

Total Hours Required for Graduation: 138

*Must satisfy University General Education Program Requirement

# MECHANICAL ENGINEERING

## Department of Mechanical Engineering

Mechanical Engineering is a broad field that contains many areas. Students are offered a wide variety of topics that touch on as many of these areas as possible in a balanced four-year program. The curriculum is designed to prepare graduates for professional practice, and to provide a foundation for lifelong learning as well as professional growth. The course of study begins with a strong foundation in mathematics, physical sciences, and engineering sciences, and culminates in a series of synthesis and design courses. These require the student to apply material learned in foundation courses to practical design problems in various areas. Traditional classroom instruction is supplemented with laboratory experiences in four areas. The laboratory courses are designed to develop the student's knowledge base with a hands-on learning experience. The program educational objectives express expectations of the program graduates' abilities within the first few years after successfully completing this comprehensive curriculum. (1) Graduates entering immediately into professional practice upon graduation are capable of performing duties of an entry-level engineering position. (2) Graduates pursuing graduate studies are capable of successfully completing an advanced degree. (3) Graduates recognize the need for and are capable of pursuing life-long learning.

The diversity encountered in the profession requires the successful mechanical engineer to have technical and non-technical skills. Courses in the humanities and social sciences enhance non-technical skills, and explore the engineer's relationship with, and responsibility to, society. Students learn that as professionals, they identify with other engineers, and that the welfare of the public is of prime concern. These non-

technical courses allow the student to interact and communicate effectively with a wide variety of individuals. One important supplement to this study is a series of lectures on engineering ethics and professionalism.

This well-rounded curriculum equips typical Mechanical Engineering graduates of The University of Memphis with the skills and perspectives required for success in a variety of professional roles. These include ability to conduct project design work, to manage projects, to interface successfully with the public, to continue their education, to conduct themselves with a professional demeanor, with propriety, and with a comportment that will make them an asset to the profession.

## Mechanical Engineering (B.S.M.E.)

### A. University General Education Program (43 hours)

See page 57 for University General Education Program requirements. Note the following requirements are specified for this program: Oral Communication and Rhetoric: ENGL 3603 instead of COMM 2381; *Mathematics*: MATH 1910 (students who have not had MATH 1730 or its equivalent must take it before enrolling MATH 1910); Social Science: ECON 2110 must be taken in addition to 3 hours from the other specified choices; *Natural Science*: PHYS 2110/2111, 2120/2121.

American Heritage: waived for B.S.M.E. students who have completed one unit of American history in high school.

### B. College and Degree Requirements (26 hours)

*Mathematics (11hours):* MATH 1920, 2110, and 3120.

*Natural Science (8 hours):* CHEM 1110/1111; and one of the following: CHEM 1120/1121, BIOL/MMCS 1110/1111.

*Collateral Courses (7 hours):* CIVL 2281 (1), 2283: EECE 2283, 2281 (1).

### C. The Major (63 - 65 hours)

1. Completion of MECH 1307, 1309, 2332, 3311, 3312, 3320, 3321, 3322, 3323, 3325 (1), 3331, 3335 (1), 3341 [C], 4300 (1), 4311, 4312 [W], 4314 [I] (4), 4322, 4323 (4), 4335, (1);
2. 9-11 hours of electives approved by the advisor. Students who declare a concentration must take the courses as designated in the following concentrations:
   a. *Biomedical Systems:* MECH 4350 (4), and one course approved by an advisor from the following: MECH 4326 or 4365.
   b. *Energy Systems*: MECH 4314 (4) and two courses approved by an advisor from the following: MECH 4305, 4309, 4313, 4315, 4331, 4333, 4337, 4369, 4391.
   c. *Mechanical Systems*: MECH 4323 (4) and two courses approved by an advisor from the following: MECH 4320, 4324, 4325, 4330, 4340, 4344, 4345, 4346, 4360, 4371, 4383,4384, 4391.

### D. Computer Literacy

This requirement is fulfilled by completing MECH 1307 and 3341.

## Typical 4-Year Mechanical Engineering Sequence

**Freshman Year**

| | | | |
|---|---|---|---|
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| CHEM 1110/1111 | 4 | Natural Science[3] | 4 |
| MATH 1910 | 4 | MATH 1920 | 4 |
| MECH 1307 | 3 | MECH 1309 | 3 |
| HMSE 1100 | 2 | PHYS 2110/2111 | 4 |
| Semester Totals | 16 hrs | | 18 hrs |

**Sophomore Year**

| | | | |
|---|---|---|---|
| Literary Heritage* | 3 | MATH 3120 | 3 |
| MATH 2110 | 4 | MECH 2332 | 3 |
| PHYS 2120/2121 | 4 | MECH 3341 [C] | 3 |
| CIVL 2131 | 3 | MECH 3311 | 3 |
| ECON 2110 | 3 | MECH 3320 | 3 |
| Semester Totals | 17 hrs | | 15 hrs |

**Junior Year**

| | | | |
|---|---|---|---|
| MECH 3312 | 3 | MECH 3323 | 3 |
| MECH 3321 | 3 | MECH 4311 | 3 |
| MECH 3322 | 3 | MECH 4335 | 1 |
| MECH 3325 | 1 | EECE 2283 | 3 |
| MECH 3331 | 3 | EECE 2281 | 1 |
| MECH 3335 | 1 | Social Science* | 3 |
| ENGL 3603 | 3 | Hist/Phil Heritage* | 3 |
| Semester Totals | 17 hrs | | 17 hrs |

**Senior Year**

| | | | |
|---|---|---|---|
| MECH 4314 [I] | 4 | MECH 4323 | 4 |
| MECH 4322 | 3 | MECH 4312 [W] | 3 |
| MECH/INSE Elective[1] | 3 | Technical Elective[2] | 3 |
| PHED* | 2 | MECH/INSE Elective[1]3 | |
| Fine Arts Heritage* | 3 | Hist/Phil Heritage* | 3 |
| MECH 4300 | 1 | | |
| Semester Totals | 16 hrs | | 16 hrs |

Total Hours: 132

Total Hours Required for Graduation: 132

*Must satisfy University General Education Program Requirement

1 An upper division course in Mechanical Engineering or Industrial and Systems Engineering. Advisor's approval required.

2 An upper division course in engineering, mathematics, physics, or chemistry. Advisor's approval required.

3 Must satisfy College and Degree Requirements

**HONORS PROGRAM:** The Honors in Mechanical Engineering Program provides an exceptional educational opportunity for highly motivated students to develop their talents, interests, and abilities within a curriculum designed to encourage independence and creativity.

**ADMISSION:** Incoming freshmen who score a minimum 26 on the ACT or its equivalent are invited to participate. Transfer students or students previously enrolled at The University of Memphis are eligible for the program if they have a minimum overall grade point average of 3.00 and a minimum grade point average of 3.25 for course work within the Herff College of Engineering. The departmental honors committee admits eligible students to the program upon approval of Intent to Pursue Honors application. Students with academic records that fall short of these requirements may apply for provisional acceptance.

**RETENTION:** Participants must maintain a minimum overall grade point average of 3.00 and a minimum grade point average of 3.25 for course work within the college to continue in the program. The departmental honors committee may grant participants failing to meet this requirement a one semester probationary period before they are dismissed from the program.

**REQUIREMENTS:** To qualify for "With Honors in Mechanical Engineering", a student must successfully complete a minimum of 18 semester hours from the following: 1) MECH 4395 and MECH 4396, 2) 9 credits of upper division mechanical engineering honors courses, and 3) 3 credits of MECH 1395, MECH 2395, or MECH 3395. A minimum grade of "B" is required in each honors course for it to count toward fulfilling the honors course requirement, but regular credit for the course will be earned if the grade is lower than a "B".

**THESIS:** A participant must select a major advisor during the first semester senior year and enroll in MECH 4395. Successful completion of this course requires acceptance of a thesis proposal by the departmental honors committee. During the second semester of the senior year a participant must enroll in MECH 4396. Successful completion of this course requires acceptance of a thesis by the departmental honors committee.

**DESIGNATION OF "WITH HONORS IN MECHANICAL ENGINEERING":** Students successfully completing the prescribed course work will have earned the designation of "With Honors in Mechanical Engineering." This designation will be recognized at the commencement ceremony and it will appear on the transcript and diploma.

**GRADUATION:** To qualify for the degree of Bachelor of Science in Mechanical Engineering, the student must satisfy University and College requirements, and obtain a minimum 2.0 grade point average on all work completed, and obtain a minimum grade of "C-" in all engineering, mathematics, physics, and chemistry courses used to satisfy degree requirements.

# The Loewenberg School of Nursing

TONI BARGAGLIOTTI, D.N.Sc., R.N., *Dean and Professor*
*Room 101 Newport Hall; (901) 678-2020*
*http://nursing.memphis.edu*
*or*
*http://www.people.memphis.edu/~uomlson*

| Department | Major | Concentration Within Major | Degree Offered |
|---|---|---|---|
| * | Nursing | | Bachelor of Science in Nursing (B.S.N.) |

* The school is not composed of departments.

Individual program requirements described in *The University of Memphis 2003-2004 Undergraduate Bulletin* are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this *Bulletin;* or consult the *Undergraduate Bulletin* website at: *http://www.people.memphis.edu/~acadafflib/bulletin/bulletin.htmlx* for the latest updates.

## PURPOSES

The primary function of The Loewenberg School of Nursing is to offer a program of study designed to prepare students for careers in professional nursing. As a part of a comprehensive university, the school is dedicated to developing scholarship in nursing and providing services that support the institutional mission. The program is designed to accommodate the needs of high school graduates, transfer students, college graduates, licensed practical nurses, and registered nurses who are graduates of diploma or associate degree nursing programs. The school is committed to: (1) providing a curriculum leading to the degree of Bachelor of Science in Nursing basic to beginning professional practice and graduate study in nursing; (2) promoting the intellectual, personal and professional development of students by offering a curriculum that combines a strong liberal education with the professional major; (3) providing a plan of study with flexible options that are responsive to the individual learner's needs; (4) encouraging the use of opportunities available in a comprehensive university setting to foster values, attitudes and personal qualities essential to living a fulfilling life and contributing to a diverse society, (5) producing politically and socially conscious graduates who are competent practitioners in a variety of settings; and (6) preparing graduates who assume leadership roles to effect change for a healthy society.

Graduates of the program are eligible to apply to take the NCLEX examination for state licensure through the respective state boards of nursing. Program applicants should be aware that conviction of the following crimes would make the student ineligible for Registered Nurse licensure in the State of Tennessee: Aggravated Assault as in T.C.A. 39-13-102; First Degree Murder, as in T.C.A. 39-13-202; Second Degree Murder, as in T.C.A. 39-13-207; Voluntary Manslaughter, as in T.C.A. 39-13-211; False Imprisonment, as in T.C.A. 39-13-302; Kidnapping, as in T.C.A. 39-13-303; Aggravated Kidnapping, as in T.C.A. 39-13-304; Especially Aggravated Kidnapping, as in T.C.A. 39-13-305; Robbery, as in T.C.A. 39-13-401; Aggravated Robbery, as in T.C.A. 39-13-402; Especially Aggravated Robbery, as in T.C.A. 39-13-403; Aggravated Rape, as in T.C.A. 39-13-502; Rape, as in T.C.A. 39-13-503; Aggravated Sexual Battery, as in T.C.A. 39-13-504; Sexual Battery, as in T.C.A. 39-13-505; Statutory Rape, as in T.C.A. 39-15-506; Theft of Property, as in T.C.A. 39-14-103; Theft of Services, as in T.C.A. 39-14-104; Forgery, as in T.C.A. 39-14-114; Falsifying of Educational and Academic Records, as in T.C.A. 39-14-136; Arson, as in T.C.A. 39-14-301; Aggravated Arson, as in T.C.A. 39-14-302; Burglary, as in T.C.A. 39-14-402; Aggravated Burglary, as in T.C.A. 39-14-404; Incest, as in T.C.A. 39-15-302; Aggravated Child Abuse, as in T.C.A. 39-15-402; Sexual Exploitation of a Minor, as in T.C.A. 39-17-1003; Aggravated Sexual Exploitation of a Minor, as in T.C.A. 39-17-1004; Especially Aggravated Sexual Exploitation of a Minor, as in T.C.A. 39-17-1005; Assisted Suicide, as in T.C.A. 39-13-216; Rape of a Child, as in T.C.A. 39-13-522.

## PROGRAM OUTCOMES

Baccalaureate graduates of the Loewenberg School of Nursing:

1. Use the nursing process, core nursing knowledge[1], and core nursing compentencies[2] to design, provide, and manage culturally competent, cost effective, direct and indirect nursing care or individuals, families, communities, and populations.
2. Integrate theoretical, empirical, and intuitive knowledge from other scientific disciplines, and the humanities into the practice of nursing.
3. Collaborate with others to provide health promotion and health care access to diverse populations.
4. Integrate professional nursing values[3] into nursing practice.
5. Modify patient care in response to changing health care systems, health policies, and global environmental factors[4].
6. Integrate selected research findings into nursing practice.
7. Maintain professional accountability for effective nursing practice and the advancement of the profession.
8. Implement nursing roles that meet the emerging health needs of individuals, families, communities, and populations.

[1] **Core nursing knowledge** includes: a) health promotion, risk reduction, and disease prevention, b) illness and disease management, and c) information and health care technologies.

[2] **Core nursing competencies** include: a) critical thinking, c) communication, c) assessment and technical skills, d) teaching, e) caring, f) management, g) leadership, and h) integration of knowledge skills.

[3] **Professional nursing values** include: a) caring, b) altruism, c) autonomy, d) human dignity, e) integrity, and f) social justice.

[4] **Global environment** factors include: a) international law and public health, b) disease transmission, c) health policy, and d) health care economics.

## ORGANIZATION

The Loewenberg School of Nursing is organized as one unit under the leadership of a dean. The curriculum leading to the degree of Bachelor of Science in Nursing includes general education and support courses offered through other units of the University as well as the major requirements offered by the School. A comprehensive approach to health care is emphasized through utilization of a wide variety of health care settings available in Memphis and the surrounding community.

The faculty of the Loewenberg School of Nursing represents all clinical areas of nursing practice and a variety of experiences and interests. They reflect this diversity in their teaching, practice and research and are qualified by practical experience as well as by academic credentials, to function as facilitators of learning.

The Loewenberg School of Nursing holds membership in the American Association of Colleges of Nursing, Southern Council for Collegiate Education in Nursing, and the National League for Nursing Council for Baccalaureate and Higher Degree Programs. The program is accredited by the National League for Nursing Accrediting Commission, 61 Broadway, 33rd Floor, New York, NY, 10006, (800) 669-1656, and the Commission on Collegiate Nursing Education, One DuPont Circle, NW, Suite 530, Washington, DC 20036-1120, (202) 887-6791 and approved by the Tennessee Board of Nursing.

## ADMISSION AND ADVISING

Because the University seeks to provide in as much as possible a reasonably safe environment for its health career students and their patients, students may be required during the course of the program to demonstrate their physical and/or emotional fitness to meet the essential requirements of the program. Such essential requirements include freedom from communicable diseases, the ability to perform certain physical tasks, and suitable emotional fitness. Any appraisal measures used to determine such physical and/or emotional fitness will be in compliance with Section 504 of the Rehabilitation Act of 1973 and the American with Disabilities Act of 1990, so as not to discriminate against any individual on the basis of disability. See specific criteria Sophomore Admission.

Core performance standards for admission and progression:

A. Critical thinking ability sufficient for clinical judgment.

B. Interpersonal abilities sufficient to interact with individuals, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.

C. Communication abilities sufficient for interaction with others in verbal and written form.

D. Physical abilities sufficient to move from room to room and maneuver in small spaces.

E. Gross and fine motor abilities sufficient to provide safe and effective nursing care.

F. Auditory ability sufficient to monitor and assess health needs.

G. Visual ability sufficient for observation and assessment necessary in nursing care.

H. Tactile ability sufficient for physical assessment.

## ADMISSION

### Freshman Admission

Qualified high school seniors admitted as freshman to The University of Memphis may at the time of admission to the University be directly admitted to the nursing major by applying to the School of Nursing after receiving admission to the University. Freshman admission to the nursing major guarantees the student who remains in good standing placement in the nursing program in the second semester of the sophomore year.

Freshmen admitted to the nursing major must remain in "good standing" by completing the prescribed curriculum at The University of Memphis for the freshman year and first semester of the sophomore year with a minimum grade of "C" (2.0) in all required prerequisite courses, a cumulative grade point average of 2.7 for the prescribed three semesters of course work, and a science cumulative grade point average of 2.4. Students who do not remain in "good standing" may reapply to the LSON in a competitive pool with other students. See Sophomore Admission.

### Freshman admission requirements:

1. Graduation from an accredited high school with a cumulative grade point average of 3.0.
2. Minimum ACT score of 21 with a minimum score of 19 in all areas.
3. Completion of high school Algebra I, II, Geometry, Biology, and Chemistry.

   Applicants will be rank-ordered on the basis of a calculated point system:

   Freshman Point System

   Cumulative high school quality point average x 100 added to the ACT score x 10 or SAT score.

### Sophomore Admission

Students who are not admitted as freshmen may apply to the Loewenberg School of Nursing when they meet the requirements identified below. To be admitted to the School, a student must:

1. Be admitted to The University of Memphis as a degree-seeking undergraduate student.
2. Have a minimum college cumulative grade point average of 2.7, a cumulative of 2.4 in prerequisite sciences. (A prerequisite science course may be repeated only once to earn a minimum grade of "C" (2.0). A maximum of two prerequisite science courses may be repeated to earn the minimum required grade.)
3. Have completed specific pre-nursing courses with a minimum grade of "C" (2.0) in all courses:
   ENGL 1010 & 1020: English Composition I & II (6)
   BIOL 2010/2011 & 2020/2021: Anatomy & Physiology I & II (8)
   CHEM 1010/1011 & 1020/1021: Introduction to Chemistry I & II (8)
   MMCS 1230/1231: Microbiology (4)
   SOCI 1111: Introduction to Sociology (3) OR PSYC 1200: General Psychology
   CSED 3202: Nutrition for Health Care preferred or CSED 2202: Nutrition (3)
   EDPR 2111: Development Across the Lifespan (3)
   MATH 1410 & 1420: Foundations of MATH I & II, or Math 2000: Experiences in Math, or MATH 1830: Elementary Calculus, or MATH 1190: Calculus I
4. Clearance of any high school deficiencies.

5. Have a minimum score of 600 (250 computer based score) on the TOEFL (for students for whom English is a second language).
6. Students who are transferring from another nursing program must submit a letter of good standing from the dean/director of the previous nursing program and a transcript.
7. Complete and submit School of Nursing application for admission to:

   Loewenberg School of Nursing
   The University of Memphis
   Newport Hall, Room 101
   Memphis, TN 38152

   Must have complete files by the deadline (February 15 for Fall; October 1 for Spring) to be considered. (In order to allow adequate time for processing of The University of Memphis transfer credit evaluation you should receive your acceptance letter to the University by September 15 for Spring term or February 1 for Fall term).

### Selection of Students

1. All students admitted as freshmen students to the nursing major who remain in good standing will be accommodated.
2. After freshmen nursing majors have been accommodated, all other students will be considered on a competitive space available basis according to GPA.

### Admission Procedures:

1. Students must have complete files by the deadline (February 15 for Fall; October 1 for Spring) to be considered.
2. Acceptance into the school will be based on rank-order cumulative GPA.
3. If individuals have the same GPA, the order will be determined by the amount of prerequisite and support course work completed.
4. A new list will be created each semester. Students who are not accepted must reapply for consideration the next semester.
5. An alternate list will be established each semester to fill vacancies that might occur before the beginning of class. The criteria for the alternate list will be the same as for the acceptance list.

## ADVANCED PLACEMENT ADMISSION—RN STUDENTS

To be admitted with advanced placement, the Registered Nurse must:

1. Be admitted to The University of Memphis as a degree-seeking undergraduate student.
2. Have current licensure as a Registered Nurse in Tennessee.
3. Submit evidence of recent clinical practice.
4. Have a minimum college cumulative grade point average of 2.7.
5. Have completed specified pre-nursing courses with a minimum grade of "C" (2.0): ENGL 1010, 1020 (6); BIOL 2010/2011, 2020/2021 (8), MATH 1410 and 1420 or MATH 1830, 1910 or 2000, MMCS 1230/1231 (4); CHEM 1010/1011, 1020/1021 (8); SOCI 1111 or PSYC 1200; CSED 3202*; EDPR 2111 Development Across Lifespan; Mathematics (3) selected from approved courses in the School of Nursing's General Education selection below.
6. Minimum of 2.4 cumulative grade point average in required laboratory science courses: BIOL 2010/2011 and 2020/2021; CHEM 1010/1011 and 1020/1021; MMCS 1230/1231. A prerequisite science course may be repeated only once to earn a minimum grade of "C" (2.0). A maximum of two prerequisite science courses may be repeated to earn the minimum required grade.
7. Must meet the Sophomore Admission Criteria identified earlier.

*Credit in CSED 2202 may also be used to meet this course requirement

## ACADEMIC ADVISING—BASIC AND RN STUDENTS

Students who are completing courses required for admission to The Loewenberg School of Nursing receive advising through the Academic Counseling Unit. However, questions about admission requirements may be addressed to the assistant dean for students in the Loewenberg School of Nursing. The Assistant Dean for Students advises RN students while they are completing courses required for admission to The Loewenberg School of Nursing. Following admission to the School of Nursing, each student is assigned an advisor from the school. The advisor will assist the student in planning for completion of the BSN program and will provide the opportunity for meaningful discussion regarding academic progress and career goals. This assistance, however, does not in any way relieve the student of the primary responsibility for studying the *Bulletin* and fulfilling all the requirements for the degree.

## LOANS AND SCHOLARSHIPS

Students are encouraged to complete applications and forms for financial aid. These are available in the Student Financial Aid Office. Some scholarships are also available through The Loewenberg School of Nursing. See Section 3 of this *Bulletin* for a list. Applications for scholarships are available in the school office.

## FEES

Practicum nursing courses require an additional fee of $60 and Skills Laboratory courses an additional fee of $50. These fees are not included in the Fee Schedule.

## RESIDENCY

University residence requirements are explained in detail in the Graduation from the University section of this *Bulletin*. Note that students transferring from a community or junior college must complete a minimum of sixty semester hours in an accredited senior institution. In addition, 31 of the last 62 semester hours for the degree must be completed at The University of Memphis.

## DEGREE REQUIREMENTS

1. To qualify for the degree of Bachelor of Science in Nursing, the student must complete a minimum of 132 semester hours with the minimum overall grade point average of 2.0 and must meet specific grade requirements described below.

2. A minimum grade of "C" (2.0) must be earned for English 1010 and 1020, each required science course, each required upper division course, and each required nursing course.
3. Detailed course requirements are described below under General Education Program Requirements, Other Support Course Requirements, and Nursing Course Requirements.

## Nursing Major (B.S.N.)

### A. University General Education Program (48 - 51 hours)

See page 57 for University General Education Program requirements. Note the following requirements are specified for this program: *Natural Science:* CHEM 1010/1011, 1020/1021, or CHEM 1110/1111, 1120/1121; *Social Science*: Non-global, PSYC 1200 or SOCI 1111.

### B. Support Courses for Nursing Major (21 hours)

**Anatomy and Physiology* (8 hours):** BIOL 2010/2011, 2020/2021

**Microbiology (4 hours)*:** MMCS 1230/1231

**Chemistry*:** See natural science requirement above.

**Growth and Development (3 hours):** EDPR 2111.

**Nutrition (3 hours):** CSED 3202.

**Statistics (3 hours):** EDPR 4541 **[C]**, PSYC 3001 **[C]**, or SOCI 3311 **[C]**, with a minimum grade of "C" (2.0).

All support courses must be completed with a minimum cumulative grade of "C" (2.0).

* Science courses must have a minimum grade point average of 2.4 and must have been completed in the past 7 years. Refer to Science Course Validation section below.

### C. The Major (60 hours)

Completion of NURS 2217, 2218 (1), 2219 (2), 2220 (1), 3000, 3101, 3117, 3118 (1), 3119 (2), 3127, 3129 (2), 3217 (2), 3219, 3227 (2), 3229, 3400, 4110 **[W]**, 4117 (2), 4119, 4120 (2), 4127, 4129, 4227, 4229 **[I]** (4).

### D. Elective (3 hours)

Any upper division course at the 3000 or 4000 level.

### E. Computer Literacy

This requirement is fulfilled by completing COMP 1200, NURS 3003, a course of study approved by the dean, or satisfactory score on the university-approved computer literacy examination.

## Nursing Course Requirements — Basic Students

**Nursing (60 hours):** NURS 2217, 2218 (1), 2219 (2), 2220 (1), 3000, 3101, 3117, 3118 (1), 3119 (2), 3127, 3129 (2), 3217 (2), 3219, 3227 (2), 3229, 3400, 4110 **[W]**, 4117 (2), 4119, 4120 (2), 4127, 4129, 4227, 4229 **[I]** (4).

**Upper Division Elective (3 hours):** Any 3000-4000 course.

## Nursing Course Requirements — RN Students

**Nursing (27 hours):** NURS 3000, 3101, 3107 (1), 3400, 4110, **[W]**, 4120 (2), 4127, 4129, 4327, 4329 **[I]**.

**Upper Division Elective (3 hours):** Any 3000-4000 course.

The remaining hours for the major requirements are fulfilled by validation.

Under the Tennessee Career Mobility Plan registered nurses who have graduated from Tennessee schools or out-of-state NLN accredited programs will be able to progress to the baccalaureate degree in nursing without testing to verify previous nursing education. Registered nurses articulating to the baccalaureate level may be awarded or transfer in nursing credits equivalent to approximately one year of nursing courses. For this to occur, a minimum grade of "C" must have been earned in previous nursing course work. Nursing credits transferred or awarded will be held in escrow. These credits will be placed on individual transcripts only after students have successfully completed 15 hours of nursing courses with a minimum grade of "C" in The Loewenberg School of Nursing. Non nursing credits are transferred according to University policies. Testing will be required for graduates of non NLN accredited programs or for students who have not been in active clinical practice in the past three years.

The following represent Typical schedule plans for basic and RN students.

### BASIC STUDENTS

## Typical 4-Year Nursing Sequence

| | | | |
|---|---|---|---|
| | **Freshman Year** | | |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| BIOL 2010/2011 | 4 | BIOL 2020/2021 | 4 |
| CHEM 1010/1011 | 4 | CHEM 1020/1021 | 4 |
| HMSE 1100 | 2 | MATH* | 3 |
| Social Science* | 3 | Fine Arts Heritage* | 3 |
| Semester Totals | 16 hrs | | 17 hrs |
| | **Sophomore Year** | | |
| Literary Heritage* | 3 | NURS 3400 | 3 |
| MMCS 1230/1231 | 4 | NURS 3101 | 3 |
| EDPR 2111 | 3 | NURS 2217 | 3 |
| CSED 3202 | 3 | NURS 2218 | 1 |
| COMM 2381 | 3 | NURS 2219 | 2 |
| PHED* | 2 | NURS 3000 | 3 |
| | | NURS 2220 | 1 |
| Semester Totals | 18 hrs | | 16 hrs |
| | **Junior Year** | | |
| NURS 3117 | 3 | NURS 3217 | 2 |
| NURS 3118 | 1 | NURS 3219 | 3 |
| NURS 3119 | 2 | NURS 3227 | 2 |
| NURS 3127 | 3 | NURS 3229 | 3 |
| NURS 3129 | 2 | Hist/Phil Heritage* | 3 |
| Social Science* | 3 | American Heritage* | 3 |
| Elective or NURS 3003 | 3 | | |
| Semester Totals | 17 hrs | | 16 hrs |
| | **Senior Year** | | |
| Statistics[1] | 3 | NURS 4110 **[W]** | 3 |
| NURS 4117 | 2 | NURS 4227 | 3 |
| NURS 4119 | 3 | NURS 4229 **[I]** | 4 |
| NURS 4127 | 3 | NURS 4120 | 2 |
| NURS 4129 | 3 | Hist/Phil Heritage* | 3 |
| American Heritage* | 3 | | |
| Semester Totals | 17 | | 15 |

Total Hours: 132

Total Hours Required for Graduation: 132

* Refer to B.S.N. University General Education Program requirements for approved courses.

[1] Take one of the following: EDPR 4541 **[C]**, PSYC 3001 **[C]**, SOCI 3311 **[C]**.

**NOTE: PROGRESSION OF NURSING COURSEWORK:** All courses in group A must be completed before enrolling in any courses in group B. All courses in group B must be completed before enrolling in any courses in group C.

A. Professional Foundation Courses: NURS 3101, 2217, 2218, 2219, 2220, 3400, 3000.

B. Provider of Care Courses: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3218, 3219, 3227, 3229.

C. Coordinator of Care Courses: NURS 4117, 4119, 4127, 4129, 4227, 4228, 4327, 4329, 4110, 4120.

**RN (Upper Division Requirements)**

**Senior Year**

| | | | |
|---|---|---|---|
| NURS 3000 | 3 | NURS 4110 [W] | 3 |
| NURS 3101 | 3 | NURS 4127 | 3 |
| NURS 3107 | 1 | NURS 4129 | 3 |
| NURS 3400 | 3 | NURS 4327 | 3 |
| NURS 4120 | 2 | NURS 4329 [I] | 3 |
| Elective or NURS 3003 | 3 | | |
| *Statistics | 3 | | |
| Semester Totals | 18 hrs | | 15 hrs |

* Take one of the following: EDPR 4541 [C], PSYC 3001 [C], or SOCI 3311 [C].

**Science Course Validation:** If seven years have lapsed since credit was earned in BIOL 2010/2011 and 2020/2021 (Anatomy and Physiology), MMCS 1230/1231 (Microbiology), or CHEM 1010/1011 and 1020/1021, or CHEM 1111/1110 and 1121/1120, the content is considered outdated, and students are required to either repeat the course(s) or validate currency of knowledge. Registered nurses may validate currency of knowledge by submitting evidence of recent clinical practice. If not currently employed as a RN, validation of current knowledge may be accomplished by taking a higher level course in the same field or by examination. The NLN tests in Anatomy and Physiology, Chemistry and Microbiology are used for this purpose. A score at the fiftieth percentile or above is required. Registered nurses are required to submit evidence of recent clinical practice to validate currency of knowledge.

## Progression in the Nursing Major:

1. A nursing course may only be entered twice.
2. A minimum grade of "C" must be earned in each nursing course to progress. Failure to earn a minimum grade of "C" will require repeating the course before attempting other nursing courses.
3. When the theory or clinical component of any course sequence must be repeated, the companion course must also be repeated even though a satisfactory grade has been earned.
4. Irregular progression students who are out of clinical nursing course work for longer than three months will be reviewed by the Student Progression Committee. The Committee may require testing or the repetition of courses in which satisfactory grades have been earned.

## Disqualification from the Nursing Major:

1. Failure to earn a minimum grade of "C" when repeating a nursing course for a grade of less than a "C".
2. Failure to earn a satisfactory grade in a clinical course when repeating the course for an unsatisfactory grade.
3. Failure to earn a minimum grade of "C" or "S" in two nursing courses.
4. Professional/academic misconduct or dishonesty.
5. Falsification of any academic/medical/ nursing record or misrepresentation of nursing care or credential.
6. Clinical practice that willfully places patients in physical or emotional jeopardy.
7. Clinical practice while under the influence of alcohol or illegal substance.

**Clinical Nursing Course Requirements:** Before enrolling in a clinical nursing course, students must present evidence of current CPR certification, professional liability insurance ($1,000,000 per occurrence/$3,000,000 aggregate minimum coverage), appropriate immunizations and titers, and a statement of good health, including a negative PPD skin test or chest x-ray. Immunizations and titers include DT, measles, mumps, polio, Hepatitis B; Rubella vaccine or titer showing immunity; varicela titer. The basic nursing student will pay for malpractice insurance at fee payment. RN students must purchase their own insurance and present evidence prior to enrolling in clinical nursing courses. RN students are also required to present evidence of current licensure in Tennessee.

Students are encouraged to complete these requirements during the semester prior to anticipated enrollment. No student will be allowed to participate in clinical learning experiences until these requirements are satisfied.

**Credit By Exam:** Credit for some of the upper division nursing courses may be earned through credit by examination. Other methods of earning credit are explained in detail in the Academic Regulations section of this *Bulletin*.

**RN Licensure:** Upon graduation from the program, graduates are eligible to take the NCLEX examination for licensure at testing sites determined by the Tennessee Board of Nursing.

**Student Organizations:** Students are encouraged to join their professional organization, Student Nurses' Association. This is the local chapter of the National Student Nurses' Association.

Senior students who have achieved a 3.0 cumulative grade point average and who are recommended by faculty are eligible to apply for induction into Sigma Theta Tau, Beta Theta Chapter at Large of the international nursing honor society.

# The University College

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*http://www.people.memphis.edu/universitycollege*

| Department* | Major** | Concentration Within Major | Degrees Offered |
|---|---|---|---|
| | Individual Studies | Alcohol and Drug Abuse Services<br>Biomedical Engineering<br>Biomedical Illustration<br>Commercial Aviation<br>Construction Management Services<br>Fire Administration<br>Fire Prevention Technology<br>Health Services Administration<br>Human Services<br>Judaic Studies**<br>(see College of Arts and Sciences)<br>Landscape Design and Horticultural Studies<br>Law Enforcement Administration<br>Nonprofit Development and Administration<br>Organizational Leadership<br>Paralegal Services<br>Pre-School and Childcare Administration<br>Services for the Aging<br>Technology Management Services | Bachelor of Professional Studies (B.P.S.) |
| | Professional Studies | Information Technology***<br>Organizational Leadership*** | Bachelor of Professional Studies (B.P.S.) |
| | Individual Studies | American Studies**<br>Judaic Studies<br>(see College of Arts and Sciences)<br>Religion in Society** | Bachelor of Liberal Studies (B.L.S.) |
| | Liberal Studies | Interdisciplinary Studies*** | Bachelor of Liberal Studies (B.L.S.) |

* University College is not composed of departments. The college's degree programs are interdisciplinary which means many required courses within a student's Coordinated Study are offered by other departments within the University.

** Minors are available in American Studies, Judaic Studies, and Religion in Society.

***These concentrations are offered on campus and completely online through the Regents Online Degree Program.

Individual program requirements described in *The University of Memphis 2003-2004 Undergraduate Bulletin* are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this *Bulletin*; or consult the *Undergraduate Bulletin* website at: *http://www.people.memphis.edu/~acadafflib/bulletin/bulletin.htmlx* for the latest updates.

## PURPOSE

University College offers students a wide variety of established and online degree opportunities. Faculty across the university provide the structure to explore and develop unlimited interdisciplinary, academic ventures. University College also seeks to create and maintain a spirit of academic community through careful and concerned advising and interaction outside the classroom among students, faculty, staff, and community professionals.

## ORGANIZATION OF THE COLLEGE

The college is administered by a dean, the dean's staff, and the University College Faculty Council that is made up of faculty from the other degree-granting colleges and schools at The University of Memphis.

## ADMISSION TO THE COLLEGE

Admission to University College follows the same procedure as admission to The University of Memphis. Interested students should attend an inquiry session. Information about dates and times for these sessions, which are held several times a month, may be obtained by calling the University College office. University College students are advised in the development of their programs and instructed in a final special project by a faculty chair or a contract/advising committee chaired by a faculty member.

## STUDENT EVALUATION

A student's performance is evaluated by: traditional grading systems (A-F), Satisfactory/Unsatisfactory and Credit/No Credit options supplemented by written narrative evaluations; credit or placement by examination; Advanced Placement examinations for degree credit where available; and credit for validated learning from experience or non-traditional instruction. Of the 124 credit-hours required for graduation (except for the Regents Online Degree Program), at least 31 of the last 62 hours must be earned through credit at The University of Memphis.

## HONORS

Students in University College may earn Honors distinction by fulfilling requirements for graduating "With University Honors." To earn this designation, which will be reflected on the student's diploma and transcript, students must complete the Honors Certificate, complete an Honors Thesis with a minimum grade of 3.0 and have a 3.25 cumulative grade point average. Some of the Honors coursework may count toward the Bachelor of Liberal Studies, Bachelor of Professional Studies, or University General Education Program courses, and some may be part of the student's elective hours. The Special Project may be designed to meet the Honors Thesis requirement. Consult the University Honors Program listing in this *Bulletin* for detailed information about the Honors designation.

## COLLEGE REQUIREMENTS

University College offers the Bachelor of Professional Studies and the Bachelor of Liberal Studies degrees. These degrees require completion of the following:

**General Education Courses (42-45 hours)**

See page 57 for the University General Education Program requirements.

Students who have completed one year of American History in high school are exempted from the American Heritage General Education Program requirement.

### Coordinated Study

The Coordinated Study component consists of 36 upper-division hours in at least two academic disciplines followed by the Special Project described below.

Coordinated Study credit may be earned through courses offered by other departments on campus, credit by examination, credit for experiential learning, transfer credit, internships, or independent study courses.

Students must earn a minimum grade of 2.0 in each graded course and a minimum of 2.25 GPA overall in the Coordinated Study. All Coordinated Study programs must include a minimum of 9 graded upper-division hours taken at The University of Memphis. These credit-hours must be earned in courses from two or more departments.

### Experiential Learning

A maximum of 31 hours for portfolio-based credit for experiential learning may be applied toward a degree. Experiential learning credit is not available for students pursuing a degree in Paralegal Services. This learning must be related to the Coordinated Study.

### Thematic Studies

Thematic Studies courses examine a particular theme, problem, issue, or epoch from several points of view. As upper-division courses, they are designed to provide ways for undergraduates to integrate previous learning. All University College students must complete a minimum of 6 credit-hours of thematic studies courses. Such courses are designated as:

UNIV 3500-3599 Thematic Studies

UNIV 4500-4599 Advanced Thematic Studies

### The Special Project

The Special Project is a major independent research project designed to integrate the knowledge gained through completion of the student's Coordinated Study courses. A faculty advisor or chair supervises the student's work on the project. The Special Project is preceded by UNIV 4990 Project Planning Seminar or an equivalent course. Students concentrating in Fire Administration and Fire Prevention Technology take TECH 3947 Applications of Fire Research instead of the Project Planning Seminar. A student must earn a minimum grade of 2.0 on the Special Project. Completed projects must also receive administrative approval before students are certified for graduation.

### Computer Literacy

This requirement is fulfilled by completing any course approved for satisfaction of the computer literacy requirement, a satisfactory score on the University-approved computer literacy examination, approval of a University College Computer Literacy Questionnaire, or a course of study approved by the dean.

### Electives

Students are not required to take electives; however, they may include courses in any subject area as electives in their degree program.

### Established Coordinated Studies Programs in Individual Studies (B.P.S. or B.L.S.)

Undergraduate students enrolling in the University College may design either of two degrees through the baccalaureate contract program: the Bachelor of Liberal Studies (B.L.S.) or the Bachelor of Professional Studies (B.P.S.). These are interdisciplinary degrees. Courses within the students Coordinated Study program must be (1) from two or more departments on campus, and (2) unlike any other degree offered by The University of Memphis. A Baccalaureate Contract/Advising Committee, comprised of faculty members from the two primary departments represented in the Coordinated Study, will assist the student in the development and execution of a degree program that serves the student's needs and meets the academic requirements of University College and The University of Memphis. One faculty member will serve as the student's committee chairperson. The committee members may be regular or adjunct members of The University of Memphis faculty. A third committee member is optional. The committee may direct the student in the preparation of a portfolio to obtain credit for knowledge gained through experience or nontraditional instruction (see Expenses and Fees for a description of credit evaluation fees). All baccalaureate contracts will be reviewed and approved by the administration of the University College and a faculty council review committee. The baccalaureate contract will include work in the following: (1) General Education, (2) Coordinated Study, (3) Thematic Studies, (4) a Special Project, and (5) electives.

#### ALCOHOL AND DRUG ABUSE SERVICES

Students in Alcohol and Drug Abuse Services will develop concentrations in either Social and Public Services or Administrative Services. All will take a core of courses in alcohol and drug abuse, social, and administrative services, and will complete their contracts by taking courses relevant to their concen-

trations. All students must have on-the-job experience, evaluated through internships or portfolio assessment, or both.

## AMERICAN STUDIES

American Studies engages students in an examination of the culture and society of the United States with attention paid to the ways in which Americans express their basic values and give meaning to their institutions and everyday social practices. These values, institutions, and practices are a reflection, in part, of the different experiences of a people, according to their race, gender, class, and historical roots. These guidelines provide students and faculty the opportunity to explore the commonalities and differences among Americans through an interdisciplinary course of study.

## BIOMEDICAL ENGINEERING AND HEALTH-RELATED BIOMEDICAL TECHNOLOGY

### Description of the Program

This interdisciplinary program prepares individuals for careers in areas of work described as "biomedical technology" and "biomedical engineering." These fields unite knowledge and understanding in the life sciences and clinical arena with engineering practice, and thereby contribute to the nation's health and economy. Freshman and sophomore courses are shared with several other degree programs in engineering and the sciences. These early courses, which provide strength in basic intellectual and methodological areas, include calculus, physics, chemistry, and biology, disciplines that are integral aspects of such careers.

### Program Summary

**A. University General Education Program (42-45 hours)**

See page 57 for the University General Education Program requirements.

[Students who have completed one year of American History in high school are exempted from the American Heritage General Education Program requirement].

**B. Coordinated Study (60 hours)**

Core Courses

BIOM 1710, 1720, 2710 (4), 2720, 3710, 4760; MATH 1920 (4), 2110 (4), 3120; CIVL 2131; EECE 2201, 2203 (1); MECH 2332; Science Sequences (16 hours beyond General Education requirement): CHEM 1110/1111, 1120/1121; BIOL/MMCS 1110/1111; BIOL 1120/1121, 3730 (4)

**C. Specialty Areas (17-18 Hours)** (choose one from below)

1. **Biochemical Systems/Tissue Engineering**
   BIOM 3730 (4), BIOM 4702 (*or* BIOM 4205); MMCS 3130; CHEM 3311, 3301; MMCS 4511; MECH 3310
2. **Bioelectrical Devices and Systems**
   BIOM 3720 (4), BIOM 4205 (*or* EECE 4270); EECE 3211, 3213, 3240; 3202 (*or* approved EECE course at 3000 or 4000 level)
3. **Biomechanical Devices and Systems**
   BIOM 3730 (4), 3750 (4); MECH 3310 (4), 3331, 3335, 3322, 3325 (*or* approved MECH course at 3000 or 4000 level)
4. **Computational Bioengineering**
   BIOM 3720 (4), 3750 (4); MMCS 3130; EECE 3202, 3221

**D. Thematic Studies (6 hours)**

Choose 2 courses from the following:
UNIV 3500-3599 (3-9), 4500-4599 (3-9), 35XX, 4520

**E. Special Project (6 hours)**

UNIV 4900, 4995

**F. Electives (Hours vary)**

**G. Computer Literacy**

Is satisfied by the successful completion of BIOM 1710 and 1720.

Total Hours 131-135

## BIOMEDICAL ILLUSTRATION

Students in Biomedical Illustration will take a common core of courses in art, photography, chemistry, and the life sciences. In addition to courses in biomedical illustration and biomedical photography, students will take appropriate courses in cinema, video, computer applications, and graphics. Students in Biomedical Illustration will complete internships in at least one academically relevant setting in the Memphis area.

## COMMERCIAL AVIATION

Students in Commercial Aviation will study General Administration or develop contracts in areas of interest such as aviation and climatology and technological or computer systems. A student must hold a private pilot license or other FAA ratings to be considered for admission. Academic credit is awarded for FAA ratings for Commercial Pilot, Instrument Rating, Multi-Engine Rating, and other ratings. Students are required to earn a minimum number of FAA ratings.

## CONSTRUCTION MANAGEMENT SERVICES

These guidelines are designed for persons wishing to increase professional skills within the construction industry. In addition to enhancing their technical knowledge and understanding, such persons will also wish to increase their skills in management, organizational relations, and communication, add to their knowledge of political and economic contexts within which the management construction fits, and enhance their ability to manage diversity and respond appropriately to workplace dynamics.

## FIRE ADMINISTRATION AND FIRE PREVENTION TECHNOLOGY

University College is the regional center for the Degrees at a Distance Program (DDP), serving fire service personnel in Alabama, Arkansas, Kentucky, Louisiana, Mississippi, South Carolina, and Tennessee. DDP is a degree completion program, offering upper-division courses in Fire Administration and Fire Prevention Technology. These courses are designed for independent study. Freshman and sophomore courses, electives, and other courses related to the fire service are taken at a college near the student's residence. Students completing the AAS in Fire Science at Southwest Tennessee Community College may transfer directly into this program. Additional articulation agreements exist with other two-year fire science programs in the region.

### CORE COURSES

PADM 3613, 3612, 3614; TECH 3940 [C], 3944, 3947, 3948

### FIRE ADMINISTRATION CONCENTRATION

PADM 3610, 3611, 3615

### FIRE PREVENTION TECHNOLOGY CONCENTRATION

TECH 3942, 3945, 3946

## HEALTH SERVICES ADMINISTRATION

Students following guidelines for Health Services Administration are experienced health care professionals who have completed non-baccalaureate programs in health care specialties such as medical laboratory technology, respiratory therapy, radiological technology, and nursing, and who want to become administrators in health care settings. They will build upon their training and experience by taking courses in such areas as business practice, administration, interpersonal skills, policy, risk management, social context of health care, and financial management. Transfer credits for their health care specialty will be considered a part of their Coordinated Study.

### HUMAN SERVICES

Students in Human Services are expected to develop a philosophical orientation to the human condition; to enlarge their understanding of social structures, values and norms; to study human growth and development; and to become informed about social change and social and bureaucratic organizations. Students in Human Services will take courses from such departments as Counseling and Personnel Services, Sociology and Social Work, Psychology, Management, and Special Education.

### LANDSCAPE DESIGN AND HORTICULTURAL STUDIES

The guidelines include study in science, applied science, graphics, design, communication, and business administration. Students may also choose a special emphasis in either construction design or ornamental horticulture. The guidelines serve persons with experience in these areas, as well as beginning students who wish to enroll at Southwest Tennessee Community College or The University of Memphis. The two institutions collaborate in offering this degree program; some courses may be taken at either institution, while other courses are offered only by the Southwest Tennessee Community College or only by The University of Memphis.

### NONPROFIT DEVELOPMENT AND ADMINISTRATION

The goal of these guidelines is to help persons understand the role of nonprofit organizations in society and to prepare them to organize, develop, and administer nonprofit organizations. Nonprofit organizations include educational, scientific, religious, and other charitable organizations, as well as private foundations, community-based organizations, professional and fraternal associations, and civic and social organizations. The guidelines are designed to serve persons who have worked, or who want to work, within the nonprofit sector as employees, or have served in the community as volunteers. Graduates may enter careers such as communications director, volunteer director, or program director for a nonprofit agency.

Objectives of the program include the study of (1) the historical and cultural context of nonprofit organizations, specifically their place within a market economy; (2) the characteristics of persons and communities served by nonprofit organizations; (3) legal, ethical, and policy issues which shape the governance, development, and operation of nonprofits; (4) relevant skills, including management of personnel, information, and finances, interpersonal communication, program evaluation, and marketing; and (5) special topics, including fundraising, philanthropy and volunteerism.

### ORGANIZATIONAL LEADERSHIP

Organizational Leadership is designed to (1) promote understanding of the nature of bureaucratic organizations and the fundamentals of administrative leadership; (2) allow students to reflect upon national and international organizational contexts and upon significant social and cultural issues raised in those contexts; and (3) promote skills in formal and interpersonal communication, including sensitivity to personal issues having an impact upon the quality of accomplishment in the work place. In addition to meeting all entrance requirements for The University of Memphis, applicants must provide documentation of a minimum of five years of organizational leadership experience and present a transcript showing at least 45 semester hours of earned academic credit or an earned associate's degree.

The Organizational Leadership Adults in Mind (AIM) program provides an accelerated schedule to west Tennessee residents in the Jackson, Dyersburg, and Millington, Tennessee areas.

### PARALEGAL STUDIES

Paralegal Studies courses are designed for students seeking professional knowledge and skills necessary to perform substantive legal work under the direction and supervision of an attorney. Only licensed attorneys are permitted to practice law; however, qualified paralegals working under attorney supervision can contribute significantly to the efficient delivery of legal services in an expanding variety of private law office, corporate, and government agency settings.

University College's Paralegal Studies Program offers the B.P.S. degree with a concentration in Paralegal Services. The paralegal professional core courses emphasize (1) theoretical and practical applications of legal and ethical principles; (2) collection, organization, and critical analysis of legal materials; (3) effective communications and computer skills; (4) initiative, flexibility, and cooperation in the workplace; and (5) preparation to meet the challenges of a demanding profession while avoiding the unauthorized practice of law by lay persons.

The Paralegal Studies Program is approved by the American Bar Association.

## Paralegal Services Advising Guidelines

Students pursuing the B.P.S. degree with a concentration in Paralegal Services complete all University College degree and graduation requirements including the Coordinated Study degree component according to the following guidelines:

**A. University General Education Program Requirements (42-45 hours)**

(See the University College advisor for appropriate courses)

**B. PARALEGAL PROFESSIONAL CORE (36 hours)**

At least 18 hours of these core courses must be completed at The University of Memphis with a minimum grade of 2.0 in each course.

Paralegal Requirements (27 hours):
LEGL 2400, 2410, 2420, 3410, 3420, 3430, 3440, 3450, 4410

Paralegal/Law Related Electives (9 hours):
Select three courses. It is recommended that any additional electives be selected from this group. CJUS 3510, 3521, 4530; FIR 3310, 4011; POLS 3211, 4217; LEGL 3481, 3482, 3483, 3484, 3485, 3486, 3487, 4450

**C. BUSINESS REQUIREMENTS (3 hours):**

LEGL 3483 or ISDS 2749

**D. COMMUNICATIONS REQUIREMENTS (6 hours):**

(One course from each group with a minimum grade of "C" (2.0) in each course):

Written Communications: ENGL 3601, 3604, 4602; MGMT 3510
Interpersonal Communications: COMM 3341, 4341; COUN 4621, 4781

**E. INTERDISCIPLINARY REQUIREMENTS (18 hours):**

(At least one course from each group with a minimum grade of "C" (2.0) in each course)

Group 1: Business and Administrative Applications
CJUS 4180; ECON 4040, 4130; FIR 3011, 3130, 4011, 4310; MGMT 3215, 4230; PADM/POLS 3601, 4221

Group 2: Philosophical and Constitutional Perspectives
CJUS 4531; HIST 3275, 3840, 4851, 4881, 4941; PHIL 3741, 4551; POLS 4211, 4212, 4405

Group 3: Law in Society
CJUS 3426, 3510, 3521, 4170, 4520; PADM 4208, 4209; PADM/POLS 4224; POLS 4416, 4504; SOCI 3420

Group 4: Ethical/Moral/Social Issues
ANTH 3035, 3242; CJUS 3152, 4130; PHIL 3411, 3511, 3514; POLS 3402; SOCI 4420, 4442, 4460, 4631

Group 5: Research and Statistical Applications
CJUS 3129; EDPR 4541; POLS 4101; SOCI 3311

## PRE-SCHOOL AND CHILDCARE ADMINISTRATION

These guidelines are designed for persons seeking careers in the administration of early childhood programs including childcare centers, both for-profit and non-profit; private and public pre-kindergarten programs; Head Start; pre-schools; parents' day out programs; before and after school care; and centers for children with special needs. Also served by these guidelines are persons with experience in childcare settings from a wide variety of backgrounds, including childcare volunteers and aides, as well as teachers and directors. In addition to core content in early childhood professional knowledge, there is course work to develop skills in fiscal management, recruiting and hiring personnel, health and safety management, board relations, marketing and public relations, and liaison with professional associations and regulatory agencies. These guidelines build upon and incorporate courses in childcare administration and early childhood studies offered at Southwest Tennessee Community College.

Note: This program does not lead to Tennessee state licensure for school administration.

## RELIGION IN SOCIETY

These guidelines are designed to serve persons who are interested in the study of religion and who want to work within some type of religious organization. They offer an historical understanding of the place of religion in society as well as an understanding of the social and individual dimensions of religious experience. They also offer an opportunity to study various religious belief systems from an academic perspective. Persons who want to serve in religious organizations may use these guidelines to gain practical skills. Graduates may enter graduate study in religion and receive further preparation for careers in religious organizations, as leaders, administrators, directors of education, counselors, teachers, social workers, or youth directors.

## SERVICES FOR THE AGING

Students in Services for the Aging will take a core of courses in gerontology, adult development, and social policy for the aging. In addition, students will enroll in courses appropriate for those seeking employment as counselors, managers, teachers, activity directors, family life workers, personnel supervisors, and the like.

## TECHNOLOGY MANAGEMENT SERVICES

Technology Management Services is designed for experienced technicians who wish to enhance their technical expertise while at the same time increasing their skills in management, organizational relations, and communication; their knowledge of contexts within which the management of technology fits; their understanding of workplace issues that can affect productivity; and their ability to manage diversity in the workforce.

## MINORS

Students majoring in any department within the University may enhance their academic experience through University College minors in American Studies, Judaic Studies, and Religion in Society. The Coordinated Study that University College students pursue is interdisciplinary, meaning courses must come from two or more departments. If a student chooses to complete a minor, courses within the minor must differ substantially from courses within the Coordinated Study. A University College student may be certified as having a minor only if at least fifteen hours taken for the minor are not included in the Coordinated Study.

## AMERICAN STUDIES

The American Studies minor engages students in an examination of the culture and society of the United States, with attention paid to the ways in which Americans express their basic values and give meaning to their institutions and everyday social practices. These values, institutions, and practices are a reflection, in part, of the different experiences of a people, according to their race, gender, class, and historical roots. This minor provides an opportunity to explore the commonalities and differences among Americans through an interdisciplinary course of study.

**The Minor: 18 hours of required courses and electives.**

**A. REQUIRED CORE COURSES (6 hours):**

UNIV 3531, 3541

**B. ELECTIVE COURSES (12 hours):**

Select one course from each of the following groups, plus two additional courses from these groups. No more than two courses from any single department will be accepted.

Group 1

COMM 4381, 4851, 4856; ENGL 3321, 3322, 3323, 3325, 3326, 3521; MUHL 4801, 4804, 4805, 4806, 4807

Group 2

ANTH 3282, 4336; GEOG 3401, 4316; HIST 3035, 3863, 4701, 4851, 4941; SOCI 3420, 4420

**C.** With the signed permission of the dean of the University College or the dean's designate, the following are acceptable: (1) A course from Group 1 of Section B can be substituted for one of the courses in Section A. (2) Up to two courses may be substituted for those listed in Section B. In content and approach, these courses will have a distinct American Studies emphasis.

## RELIGION IN SOCIETY

The University College offers an interdisciplinary minor in Religion in Society. This minor examines the role of religion in society as seen from the perspectives of cultural and social organizations; of history and philosophy; of art and music. The minor is open to students majoring in any area within any undergraduate college at The University of Memphis or to special students who wish to enroll in order to take such a program.

**The Minor: 18 hours of core courses and electives.**

**A. Required Core Courses:**

PHIL 3701; ANTH 4253; UNIV 2850

**B. Additional Courses (select one course each from any three of the following four groups of courses):**

Group 1

ANTH 3351; JDST 4511; SOCI 3860; POLS 3102

Group 2

JDST 3801, 3802; PHIL 3411, 3511, 3721, 4711; UNIV 3581

Group 3

HIST 3272, 3274, 3275, 3290, 4361, 4371, 4372, 4390, 4882

Group 4

ARTH 4130, 4143, 4181; ENGL 4461; CLAS 2481; JDST 3661; MUSA 4101, 4105; UNIV 3580

## A SECOND BACHELOR'S DEGREE

Students seeking to earn a second bachelor's degree through University College must satisfy all degree requirements of the college, the university, and the Tennessee Board of Regents.

## REGENTS ONLINE DEGREE PROGRAM

The degrees offered are:

Bachelor of Professional Studies with concentrations in Information Technology or Organizational Leadership

Bachelor of Interdisciplinary Studies

(General Studies/Liberal Studies/University Studies)

Tennessee Board of Regents' colleges, universities, and technology centers joined to offer the Regents Online Degree Programs (RODP). All the institutions are fully accredited. All six TBR universities deliver and award the noted bachelor degrees. Courses completed in the Regents Online Degree Programs are entirely online and transferable among all the participating institutions.

For information about the requirements and courses for the Regents Online Degree Program, please see:

*http://www.tn.regentsdegrees.org/campus/memphis/*

# Independent Departments and Programs

There are several independent units that contribute to undergraduate programs. The independent departments or programs included here are Transitional Academic Studies and University Honors Program.

## Developmental Studies

*http://www.people.memphis.edu/~dstudies*

The University of Memphis permits students to enroll in special basic/developmental level courses to develop the academic competencies necessary for success in college level courses.

### ACT/SAT and COMPASS Placement

Students admitted to The University of Memphis will be assessed by valid ACT/SAT scores for English, mathematics, and reading. (Valid scores are those earned within three years prior to the first day of a student's entering term.) The ranges used for placement can be found at this link: *http://www.people.memphis.edu/~dstudies/ACT.htm*

Students without valid ACT/SAT scores and without college level credit in math or English will be required to take the COMPASS test in the appropriate areas.

Students who feel they have been misplaced by their ACT/SAT scores are encouraged to take the COMPASS test, which can place them in a higher level course.

A list of COMPASS dates can be obtained from room 203, Administration Building, 901/678-2028, or on the web at *www.people.memphis.edu/~dstudies*. Students must pre-register for the test by noon of the day preceding the test. **The COMPASS test must be completed prior to a student's first enrollment.**

Depending on valid ACT/SAT scores or the results of the COMPASS test, students may be required to take one or more basic/developmental (DSP) courses. Students placing in these courses must enroll in and begin each subject-area sequence at the level indicated by their ACT/SAT scores or by their COMPASS results and complete that particular sequence before enrolling in the subsequent college level course.

#### CREDIT

Each DSP course carries three semester hours of non-degree college level credit.

The credit will count in the calculation of full-time status and the undergraduate joint (UJ) grade point average, and toward eligibility for athletics, financial aid, scholarships, and housing.

#### ACADEMIC ADVISING

Students requiring DSP courses should be advised in the Academic Counseling Unit (ACU).

#### COURSE GRADES AND CLASS ATTENDANCE

The grading scale for DSP courses is A, B, C, F. No audit students will be permitted. Regular class attendance is mandatory and will be used in determining semester grades.

## UNIVERSITY HONORS PROGRAM

MELINDA L. JONES, Ph.D., *Director*

*Room 404, Jones Hall, (901) 678-2690*

*http://www.people.memphis.edu/~wwwhonors*

The University Honors Program, founded in 1972, provides exceptional educational opportunities for highly motivated and talented students. The Program enables students (regardless of major) to take advantage of the more intimate learning environment offered by small classes. Honors faculty members promote active learning and provide excellent teaching, including individualized support and attention.

The Program offers special curricular options and the opportunity to earn honors distinction. In most cases, participation in the Program does not increase the number of credit hours required for graduation. Classes within the Program span the entire range of the University.

The University Honors Program encourages and supports opportunities that are designed to enhance the educational experience of its members. The Honors Program also coordinates special academic, social, and cultural events for Honors students in which they can become part of a community of friends and fellow scholars outside the classroom. Students in the Honors Program benefit both personally and professionally from the special programs and individualized attention that characterize the University Honors Program.

The University Honors Program office is located in room 404, Jones Hall. Also located on the 4th floor of Jones Hall are a conference room, a study and lounge area, and a computer room for the use of UHP students. The Director and Program staff may be reached at 901-678-2690.

### Admission and Retention Standards and Procedures

National Merit Finalists, National Achievement Finalists, and recipients of The University of Memphis' Distinguished Scholarships are automatically admissible to the Program upon receipt of their applications. Other incoming freshmen who score a minimum of 27 on the ACT, or its equivalent on other tests, and have a 3.5 high school GPA are invited to participate. Transfer students or students currently enrolled at The University of Memphis are also eligible for the Honors Program if they have earned an overall grade point average of 3.00 for freshmen and sophomores and 3.25 for juniors and seniors. Students who do not qualify in one of these ways will be considered for provisional admission upon direct application. Letters of recommendation, though not required, may also be submitted.

To be considered for admission, applicants must be admitted to The University of Memphis and complete a separate application for admission to the Honors Program. An application for admission may be obtained from the Honors office or downloaded for the UHP's web site: *http://www.people.memphis.edu/~wwwhonors*.

Honors students are expected to maintain good academic standing to continue in the Program; normally this is a minimum cumulative GPA of 3.0 in the freshman and sophomore years, and a minimum of 3.25 cumulative GPA in the junior and senior years. Students whose GPAs fall below the mini-

mum will be allowed one probationary semester to raise their GPAs to the expected level.

Students in the University Honors Program Typically take one or two honors courses each semester. However, all students are expected to take at least one honors course during each academic year of their first two years in the program in order to maintain the privilege of priority registration.

## The Honors Curriculum and Requirements

The Honors curriculum includes Honors sections of General Education Program courses and other courses that fulfill core curriculum requirements. Honors programs offered by some major departments also offer special Honors sections of courses required for the major. Honors sections have the advantage of small class size, specially selected faculty, teaching that emphasizes student participation, and assignments that encourage students to think independently.

In addition to Honors sections of regularly offered courses, the Honors Program also offers courses designed specifically for Honors students. Courses carrying the UNHP prefix are interdisciplinary in nature, designed to explore a particular topic intensively and creatively.

Students also may earn Honors credit by designing their own special projects based on independent study, fieldwork, or an internship experience (see UNHP 4900 course descriptions), or by contracting for Honors credit within the context of a regularly scheduled course not officially offered as an Honors course. Detailed information about earning Honors credit through these approaches is available in the Honors office. A minimum grade of "B" (3.0) is required in each honors course for it to count toward fulfilling the honors course requirement, but regular credit for the course will be earned if the grade is lower than a "B" (3.0).

Lower division students are expected to pursue the Honors Certificate, whereas upper division students may choose from two tracks leading to graduation with honors: Graduation with University Honors and Departmental or College Honors.

**THE HONORS CERTIFICATE:** The Honors Certificate is awarded to any honors student who completes a minimum of 12 hours of honors course work (usually University General Education Program courses) with a minimum grade of "B" (3.0) and the 1 hour credit Honors Forum (see UNHP 1100 for course description of the Honors Forum). Students must have a 3.25 cumulative grade point average to qualify for the certificate.

The following stipulations apply to the Honors Certificate:

1. Students may earn Honors credit for courses that count toward their majors, but unless these courses also earn General Education Program credit, no more than three hours credit toward the certificate will be awarded for Honors work within the major.
2. No more than three hours credit may be earned on a contract basis.
3. No more than three hours credit may be earned through UNHP 4900.

**Graduation with University Honors:** To earn this designation on the diploma and transcript, students must complete the Honors Certificate, complete an Honors Thesis with a minimum grade of "B" (3.0), and have a 3.25 cumulative grade point average. The requirements for Graduation with University Honors are sufficiently flexible to enable undergraduates to also pursue Departmental or College Honors.

**Departmental or College Honors Programs:** Some academic departments offer honors programs based on work in the major. Academic areas in the Fogelman College of Business and Economics offer a college-wide program for students pursuing the Bachelor of Business Administration, and several disciplines in the College of Arts and Sciences offer student the opportunity to earn Honors distinction through special projects and independent study.

Generally speaking, students must have a 3.25 cumulative grade point average to pursue and receive department or college Honors. Consult the specific department or college listing in this *Bulletin* for detailed requirements, or contact the Honors Program office for a listing of departments offering Honors work in the major.

## The Non-Resident Honors Student Award

A limited number of Non-Resident Honors Student Awards are available on a competitive basis to non-resident students who enroll full-time and who are actively pursuing a University Honors Program designation. This award allows out-of-state student to pay in-state tuition. Students who receive this award are required to maintain good standing with the Honors Program, take at least one Honors course every semester until they have earned the baccalaureate degree, and work toward graduation with University, College, or Departmental Honors. Entering freshman receive primary consideration for this Award. Application forms for admission to the University Honors Program and for the Non-Resident Honors Student Award may be obtained by writing to The University Honors Program, 404 Jones Hall, The University of Memphis, Memphis, TN 38152-6140; by calling 901-678-2690; or by faxing 901-678-5367.

## Special Opportunities for Honors Students

Students in the Honors Program participate in an intellectually vibrant atmosphere that extends beyond the classroom. Honors students are challenged by enriched honors courses, interdisciplinary seminars, and conversations with visiting scholars. Students have opportunities to participate in nationally recognized undergraduate conferences and to extend their learning beyond the classroom and into the community through internships and public service. Students in the program may elect to live in Honors-designated housing, which provides an atmosphere conducive to studying, but at the same time a place where friendships are easily established.

Because of the special nature of their contribution to the University, Honors students enjoy other privileges as well, including priority registration, an Honors computer lab, and special ceremonies that recognize outstanding students.

## Other Programs Administered by the University Honors Program

**National Student Exchange:** The University of Memphis is a member of the National Student Exchange (NSE). Students at NSE member institutions may spend a semester or up to a full year at other participating institutions, while paying tuition and fees Typically comparable to costs of attending The University of Memphis. Students might exchange to experience a different part of the country or to pursue special academic opportunities offered by other member institutions. Over 130 member institutions in nearly every state and Puerto Rico and the Virgin Islands have exchanged over 40,000 students since the program was established in 1968.

Participating students must have a 2.5 grade point average at the time of application for the NSE exchange. Applications are screened by The University of Memphis and will include biographical essays, transcripts, and letters of reference from faculty. Institutions to which students are applying then select incoming exchange students based on how many students they are able to accept and the strength of the students' applications. Ninety-seven percent of students are placed in the first, second, or third choice exchange institutions; 84% are placed at their first choice institution.

For more information and applications, see the NSE coordinator in the University Honors Program office.

**Undergraduate Research Scholar Program:** The University Honors Program participates in the Undergraduate Research Scholar Program that provided students the opportunity to present individual research at student research forums on campus. The Honors Program sponsors the Works-in-Progress Symposium (WIPS) held at The University of Memphis each November, which gives all undergraduates an opportunity to present their research. A steering committee evaluates the student research projects and recommends whether the students should apply for acceptance to The National Conference on Undergraduate Research (NCUR) during the spring semester.

Students who attend both WIPS and NCUR, and present at one other approved research forum can earn the designation "Undergraduate Research Scholar" on their transcript. Membership in the University Honors Program is not required for this transcript designation.

# 7. Course Descriptions

## Tennessee Board of Regents' Minimum Degree Requirements

### Common Catalog Statement

All universities and community colleges in the Tennessee Board of Regents System (TBR) share a common set of Minimum Requirements for baccalaureate degrees or associate degrees designed for transfer. The Minimum Degree Requirements specify thirty-two semester credit hours in the following subject areas:

| Subject Area | Semester Credit Hours Required |
|---|---|
| **English Composition** | 6 |
| **Humanities,** including at least 3 semester credit hours in literature | 9 |
| **History**<br>TBR Universities require American History, except in a limited number of majors exempted from the requirement. (See specific university catalogs concerning majors that are exempt.)<br>Community colleges may specify American History, Western Civilization, World Civilization, or World History in accordance with the requirements of institutions to which students plan to transfer.<br>At either universities or community colleges, students may substitute 3 semester credit hours of Tennessee History for the American History requirement. | 6 |
| **Natural/Physical Sciences and Mathematics,** to include one year of science and at least one course in mathematics | 9 |
| **Physical Education Activity Courses** (to be taken as two one-semester credit hour courses).<br>Institutions may substitute satisfactory participation in ROTC, marching band, or armed forces experiences for physical education activity courses. | 2 |
| Total | 32 |

Every TBR institution incorporates the thirty-two semester hours listed above into its degree program requirements and accepts all courses designated as meeting these requirements at other TBR institutions. By ensuring the transferability of courses fulfilling the Minimum Degree Requirements, the TBR has eliminated unnecessary repetition of these courses by students transferring to institutions within the TBR System. Because each TBR institution has a unique mission and its own distinctive curriculum, an institution may require students to complete additional courses in the Minimum Degree subject areas and in other areas that may comprise an institutional General Education Program. Students planning to receive a bachelor of arts or associate of arts degree must demonstrate proficiency in a foreign language as prescribed in the institutional degree requirements.*

> [*Note: Beginning in 2002, the last sentence of this paragraph will be altered to: "TBR policy requires that students planning to receive an associate of arts degree or a bachelor of arts degree must demonstrate proficiency in a foreign language equivalent to one year for the associate of arts degree and two years for the bachelor of arts degree." The intent of this alteration is to make it clear that this foreign language proficiency requirement derives from TBR policy.]

#### Identifying Courses Satisfying the Minimum Degree Requirements

Although the courses fulfilling the minimum degree requirements may vary in actual design among institutions, many contain similar content. These courses are identified by common course rubrics (prefixes) and numbers in all TBR institutions to facilitate transferability. The actual courses designated by each institution to fulfill the Minimum Degree Requirements, including courses that may not be a part of the common course prefix and numbering pattern, are denoted in catalogs by the ♦ symbol. A complete matrix of courses that satisfy the Minimum Degree Requirements at all TBR institutions and an explanation of the common course rubric and numbering system are available on the TBR web page (*www.tbr.state.tn.us*).

## General Education Program Courses Satisfying TBR Minimum Degree Requirements At The University of Memphis

In accordance with TBR Policy, The University of Memphis has designed its General Education Program so that the Minimum Degree Requirements are met by students who complete the appropriate Categories within the Program. The following table shows the General Education Categories containing courses that satisfy the Minimum Degree Requirements. (The actual courses included in each Category are listed on page 57 under the heading "University General Education Program," and they are indicated with a "G" symbol in the course section of the Bulletin):

| Minimum Degree Requirements | General Education Program Category |
|---|---|
| English Composition | English Composition |
| Humanities | Literary Heritage<br>Fine Arts Heritage<br>Historical/Philosophical Heritage I/II |
| History | American Heritage |
| Natural/Physical Sciences and Mathematics | Mathematics<br>Natural Science |
| Physical Education Activity Courses | Fitness/Wellness |

## (AAAS) AFRICAN AND AFRICAN AMERICAN STUDIES

**Interdisciplinary Studies Office**

*Room 213, Mitchell Hall*

*http://cas.memphis.edu/~isc/aaas/*

**AAAS 2100. Introduction to African and African American Studies. (3).** Status of Africans and African Americans in historical and modern times.

**AAAS 3100. Research Methodology in African and African American Studies. (3).** Students design research project focusing on African and African American experiences and issues.

**AAAS 4100. Seminar in African and African American Studies. (3).** Capstone course to provide an integrated and interdisciplinary understanding of the black experience which arises from culture, society, and the natural world.

**AAAS 4901. Independent Study. (1-3).** Readings and writing assignments designed to further student's understanding of specialized areas within African and African American studies. May be taken for a maximum of 6 hours credit.

**AAAS 4990-4999. Special Topics in African and African American Studies. (3).** Topics are varied and in online class listings. May be taken for a maximum of 6 hours credit.

## (ACAD) ACADEMICS - ORIENTATION PROGRAM

*Room 205, Administration Building*

The Orientation Program offers a 3-hour credit course for entering freshmen only. This course has been specially designed to assist freshmen in making the transition to higher education by introducing them to the expectations and opportunities provided by the University.

**ACAD 1100. Introduction to the University. (3).** History, philosophy, and principles of higher education, with emphasis on The University of Memphis. Special attention to developing student skills necessary to meet the intellectual expectations of the University. OPEN TO FRESHMEN ONLY.

## (ACCT) ACCOUNTANCY

KENNETH R. LAMBERT, Ph.D., *Director*

*Room 200, Fogelman College of Business and Economics Administration Building*

**Students must have junior standing and have met specific course prerequisites with a minimum grade of "C" (2.0) to be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of "C" (2.0) in each; (2) minimum of 2.25 GPA (2.5 GPA for Accounting majors) in all required lower division business courses and MATH 1830, and (3) 55 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements).**

**A surcharge of $10.00 per credit hour for 3000 and 4000 level courses and $20.00 per credit hour for 6000-9000 level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).**

**ACCT 2010. Fundamentals of Accounting I. (3).** Introduction to measurement, realization, classification and disclosure concepts about businesses' financial statement; emphasis on how managers, creditors, and investors can analyze financial accounting information to make investment, financing, and operating decisions.

**ACCT 2020. Fundamentals of Accounting II. (3).** Introduction to measurement and disclosure concepts about cost and profit of products, services, and organizational units; emphasis on how managers can use internal and external information to make resource allocation decisions, to plan and to control investment and make operating decisions. PREREQUISITE: ACCT 2010.

**ACCT 3110. Intermediate Accounting I. (3).** Review of accounting process and financial statements; cash; receivables and short-term investments; inventories; investments in equity securities, income recognition; operational assets; intangibles. PREREQUISITE: ACCT 2020, or permission of director.

**ACCT 3120. Intermediate Accounting II. (3).** Long-term debt; corporations, formation and changes after formation; retained earnings; investments in debt instruments; statement of cash flows; pensions; leases; E.PS.; deferred income taxes; accounting changes; financial reporting. PREREQUISITE: ACCT 3110.

**ACCT 3310. Cost Accounting. (3).** Cost systems, including job order, process, and standard, as management information systems for planning and control. Allocation of indirect costs, preparation of variable budgets, and determination of standard cost variances and their meaning. PREREQUISITE: ACCT 2020.

**ACCT 3510. Federal Income Tax I. (3).** Introduction to the federal income taxation of individuals. PREREQUISITE: ACCT 2020.

**ACCT 4020. Accounting Systems. (3).** Accounting systems analysis and design emphasizing the accounting cycles approach; theory of systems control in an organizational setting; holistic approach of synthesizing the accounting, financing, operating, and production functions where applicable. On-site practicum. PREREQUISITE: ACCT 3110; PREREQUISITE or COREQUISITE: ACCT 3310.

**ACCT 4211-6211. Advanced Financial Reporting. (3).** Business combinations; accounting methods for consolidated financial statements; foreign transactions and accounting for foreign subsidiaries; partnership accounting; state and local government accounting. PREREQUISITE: ACCT 3120.

**ACCT 4240. Audit and Assurance Services. (3).** Ethics in accounting practices, internal control, auditing standards and procedures, programs of audit of various accounts, reports to clients. PREREQUISITE: ACCT 3120; PREREQUISITE or COREQUISITE: ACCT 4020.

**ACCT 4241-6241. Information Systems Auditing and Assurance. (3).** Auditing of computer-based systems; emphasis on auditing software and computer auditing techniques used to evaluate accounting systems controls and test accounting data integrity; nature and use of expert systems in accounting with emphasis on their use as an audit tool. PREREQUISITE: ACCT 3120; PREREQUISITE or COREQUISITE: ACCT 4240.

**ACCT 4300. Financial Statement Analysis. (3).** Comprehensive and up-to-date treatment of analysis of financial statements in assessing an organization's risk in decision making. PREREQUISITE: ACCT 2020.

**ACCT 4310. Advanced Cost Accounting. (3).** Budgets, determination of standards, variances and their functions, cost reports, profit projecting, direct costing, gross profit and break-even analysis, cost-profit-volume analysis, capital expenditure control, comparative cost analysis. PREREQUISITE: ACCT 3310.

**ACCT 4410. Advanced Computer Applications in Accounting. (3).** Advanced techniques for the use of computer application packages and programming in such areas as financial modeling, financial analysis, productivity, and presentation as well as other applications of current and anticipated interest and benefit to the accounting profession. Enrollment restricted to students who are governed by catalogs prior to 1993-1994. PREREQUISITE: ISDS 2749, or equivalent.

**ACCT 4520-6520. Taxation of Business Entities. (3).** Introduction to the federal income taxation of corporations, partnerships, estates and trusts. PREREQUISITE: ACCT 3510.

**ACCT 4540. Governmental, Health Care/Not-for-Profit Accounting. (3).** Basic accounting and reporting procedures for governmental units, universities and other not-for-profit entities. PREREQUISITE: ACCT 2010.

**ACCT 4910. Problems in Accounting. (1-3).** Students will conduct approved projects in major area under supervision of faculty. PREREQUISITE: permission of director.

**ACCT 4911. Internship in Accounting. (1-6).** Internship in business organization to gain on-the-job experience. Project to be approved, supervised by department faculty member. Credit allowed only after acceptance of report, varies with complexity of duties. PREREQUISITE: have successfully completed at least 15 hours of upper division business courses and have a 2.75 GPA in these upper division courses.

**ACCT 4920-29. Special Topics in Accounting. (3).** Topics are varied and in online class listings. May be repeated for a maximum of 6 hours credit when change in topic. PREREQUISITE: permission of director.

**ACCT 4996. Senior Honors Thesis in Accountancy. (3).** Independent research open only to those students enrolled in the honors program. Thesis supervised by faculty member; approved by the Director of the School. PREREQUISITE: senior standing and permission of the director of the college honors program.

## (AERO) AEROSPACE STUDIES

CHARLIE RAY YOUNG, M.P.A., LT. COL., USAF, *Professor of Aerospace Studies*
*Room 118, Hayden Hall*

*http://www.people.memphis.edu/~AFROTC/*

**AERO 1111. The Air Force Today. (1).** Survey course designed to introduce students to the United States Air Force and Air Force ROTC. Topics include Air Force mission and organization, customs and courtesies, officer opportunities, problem solving, and communication skills. One class hour per week and one and one-half hours of Leadership Laboratory. * **[G]**

**AERO 1112. The Air Force Today. (1).** Continuation of AERO 1111. One class hour per week and one and one-half hours of Leadership Laboratory. * **[G]**

**AERO 2211. The Air Force Way. (1).** Survey course designed to examine general aspects of air and space power through a historical perspective. The course covers the time period from the first balloons and dirigibles to the space-age global positioning systems of the Persian Gulf War. Leadership Laboratory is mandatory for AFROTC cadets. One class hour per week and one and one-half hours of Leadership Laboratory.* **[G]**

**AERO 2212. The Air Force Way. (1).** Continuation of AERO 2211. One class hour per week and one and one-half hours of Leadership Laboratory. * **[G]**

### PROFESSIONAL OFFICER COURSES

**AERO 3211. Aerospace Studies Four-Week Field Training. (4).** Twenty-eight day course conducted during summer at active installation of USAF, consists of approximately 185 hours of instruction in Air Force base functions, leadership, physical training, Air Force environment, career orientation, and survival training. Students assigned to groups of twenty-five and individually counseled and evaluated on their performance. Emphasis on self-initiated leadership activities. PREREQUISITE: AERO 1111, 1112, 2211, 2212, or equivalent.

**AERO 3212. Aerospace Studies Five-Week Field Training. (6).** Forty-two day course conducted during summer at active installation of USAF. Consists of approximately 258 hours of instruction on role of military forces, organization of Defense Department, instruments of national security, Air Force base functions, leadership, physical training and Air Force environment. Students are assigned to groups of approximately twenty-five and individually counseled and evaluated on their performance.

**AERO 3311. Air Force Leadership and Management. (3).** Study of leadership, Air Force personnel and evaluation systems, management fundamentals, professional knowledge, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to demonstrate and exercise practical application of concepts studied. Three class hours per week and one and one-half hours of Leadership Laboratory.*

**AERO 3312. Air Force Leadership and Management. (3).** Continuation of AERO 3311. Three class hours per week and one and one-half hours of Leadership Laboratory.*

**AERO 4411. Preparation for Active Duty. (3).** Examines the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics include the military as a profession, officership, military justice, civilian control of the military, and prepa-

ration for active duty. Within this structure, continued emphasis is given to refining communication skills. Three class hours per week and one and one half hours of Leadership Laboratory.*

**AERO 4412. Preparation for Active Duty. (3).** Continuation of AERO 4411. Three class hours per week and one and one-half hours of Leadership Laboratory.*

***Leadership Laboratory.** Freshman-/Sophomore-level topics (supporting the General Military Course) include Air Force customs and courtesies, drills and ceremonies, issuing military commands, instructing, environment of the Air Force officer, and officer opportunities. Junior-/Senior-level topics (supporting the Professional Officer Course) include such advanced leadership experiences as planning and controlling cadet wing activities, preparing and presenting oral and written communication, and providing the guidance and information needed to train and motivate other cadets. One and one-half hours per week.

## (ANTH) ANTHROPOLOGY

DAVID H. DYE, Ph.D., *Chair*
*Room 316, Manning Hall*

*http://www.people.memphis.edu/~anthropology/*

**ANTH 1100. Human Origins and Variation. (3).** Biocultural basis for understanding humans; emphasis on fossil record and origins and development of humans, human society and culture; primate models and human behavior; human variation. **[G]**

**ANTH 1200. Cultural Anthropology. (3).** Origin and development of human culture; social relations, language, government, religion and ritual, and problems of developing nations or minority groups in the modern world. **[G]**

**ANTH 1300. Introduction to Archaeology. (3).** Introduction to principles of archaeological methods and theories; use of material remains to interpret past human cultures.

**ANTH 3111. Human Paleontology. (3).** Hominid fossil record starting with primate developments; human evolution; human osteology.

**ANTH 3200. Peoples and Cultures of the World. (3). (Same as GEOG 3200).** Major ethnographic areas and selected cultures of the world.

**ANTH 3232. Cultural Heritage of Latin America. (3).** Description and distribution of prehistoric and contemporary peoples and cultures of South America and Mesoamerica; comparisons and interrelationships during pre- and post-contact periods.

**ANTH 3242. Peoples of Africa. (3).** Description and distribution of peoples and cultures of Africa; comparisons and inter-relationships during pre- and post-contact periods.

**ANTH 3282. Cultural History of American Communities. (3).** Cultural historic interpretation of formation, development and transformation of diverse community life-patterns in America; emphasis on analysis of community as it reflects change in settlement patterns, kinship networks, political, religious, economic and value systems in American society. **[G]** ♦

**ANTH 3300. The Ascent to Civilization. (3). (Same as HIST 3300).** Interdisciplinary integrative examination of nature of civilization through investigation of origins of civilization and comparative study of world's earliest civilizations. PREREQUISITE: 9 hours of anthropology and/or history including either ANTH 1100 or HIST 1110. **[I]**

**ANTH 3351. Old World Archaeology. (3).** Old World cultures from first humans to early civilizations.

**ANTH 3511. Culture, Kin and Family. (3).** Changing structure of family in Western and non-Western societies; cross-cultural approaches to mate selection, courtship rituals, kinship organization, institution of marriage, division of labor and authority in household, and childbearing; variation and flexibility in family structures as adaptive strategies for environmental, social and cultural change.

**ANTH 3711. Culture and Technology. (3).** Origin, evolution of human technology and material culture; comparative analysis of organization of work and leisure in preindustrial through industrial societies; tools, techniques, manufactures in structure of daily life, creation of meaning, expression of social identity.

**ANTH 4010. Anthropological Methods of Field Research. (3-6). (3225).** Various qualitative and quantitative methods of anthropological research; includes preparing for field research, collecting data, analyzing data and writing ethnographic descriptions of contemporary societies. **[W, C]**

**ANTH 4020-6020. Visual Archiving in Anthropology. (3).** Anthropological use of photography as a research tool; emphasis on anthropological field, museum, and laboratory photography. NOTE: Prospective students are advised to obtain a list of course expenses from the Anthropology Department before registering. PREREQUISITE: ART 2701 or permission of instructor.

**ANTH 4051-6051. Anthropology and Education. (3).** Advanced study of cultural transmission process with emphasis on identifying differing behavioral, cognitive and learning styles of various ethnic groups within American society and selected third world countries; encounters of U.S. subcultural groups with public education system. PREREQUISITE: permission of instructor.

**ANTH 4065-6065. Contemporary Anthropological Theory. (3).** Contemporary growth of theories and methods in anthropology.

**ANTH 4111-6111. Human Adaptations. (3).** Examines the physical and cultural adaptations of humans in an evolutionary and ecological context; information from primate studies, the archaeological record and studies of contemporary societies; envionmental context of physical adaptations, cultural adaptations, language, social organization. PREREQUISITE: ANTH 1100, 1200, or permission of instructor.

**ANTH 4120-6120. Africa's New World Communities. (3).** Survey of African American cultures in the New World emanating from 17th and 18th centuries slave trade; focus on African Diaspora; Caribbean, Central America, South America and North America.

**ANTH 4200-6200. Ecological Anthropology. (3).** Critical examination of concepts for ecological analysis of formation, maintenance and change of human social groups; draws on the archaeological record and contemporary studies to examine interactions between cultures and environments; implications of the ecological approach for the study of human societies. PREREQUISITE: ANTH 1100, 1200, or permission of instructor.

**ANTH 4220-6220. Culture and Environment. (3).** Role of culture in the use and management of natural resources; discusses how societies construct knowledge about nature and attribute value to it; examines how indigenous knowledge, alternative value systems and traditional management strategies influence policy decisions at the local, national, and international levels. PREREQUISITE: ANTH 4200 or permission of instructor.

**ANTH 4251-6251. Psychological Anthropology. (3).** Examines the relationship between culture and personality; cross-cultural comparison of perspectives on cognition, mental illness, ethnopsychiatry and ethnotherapies.

**ANTH 4253-6253. Anthropology of Religion. (3).** Comparative analysis of religious systems and their functional relationships to other cultural institutions; interrelations of myth, magic, and ritual; types of religious institutions and religious practitioners.

**ANTH 4257-6257. Archaeology of the Southeastern United States. (3).** Intensive study of various prehistoric cultures form earliest times until historic contact. PREREQUISITE: ANTH 1100, 1200, 1300, or permission of instructor.

**ANTH 4301-6301. Archaeology of North America. (3). (3331).** Intensive study of various prehistoric cultures from earliest times until historic contact. PREREQUISITE: ANTH 1100, 1200, 1300, or permission of instructor.

**ANTH 4302-6302. Native Peoples of North America. (3). (3231).** Ethnology of North America; intensive study of various prehistoric cultures from earliest times until historic contact. PREREQUISITE: ANTH 1100, 1200, 1300, or permission of instructor.

**ANTH 4325-6325. Archaeological Field Techniques. (3).** Instruction in field excavation, specimen preparation, use of survey instruments and photography, map making, archaeological record keeping. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.

**ANTH 4326-6326. Archaeological Laboratory Techniques. (3).** Methods and techniques in archaeological laboratory analysis; emphasis on organization and supervision of laboratory procedures. PREREQUISITE: permission of instructor.

**ANTH 4327-6327. Lithic Artifact Analysis. (3).** Lithic artifact analysis and prehistoric stone tool technologies; raw material studies; typologies; hands-on experience with basics of flintknapping, debitage analysis, use-wear analysis. PREREQUISITE: ANTH 1100, 1200, 1300, or permission of instructor.

**ANTH 4333-6333. Archaeological Site Reconnaissance. (3).** Field course to provide basic understanding of applied archaeology including governmental Phase I, Phase II research; site survey, site mapping, surface collections, site testing and rapid site assessment. PREREQUISITE: permission of instructor.

**ANTH 4336-6336. Native Peoples of the Southeastern United States. (3). (3035).** Ethnology of Southeast; intensive study of various Native American cultures in the Southeast during the post-contact period. PREREQUISITE: ANTH 1100, 1200, 1300, or permission of instructor.

**ANTH 4370-6370. Historic Archaeology. (3).** Contributions of archaeologists to historical research; methods and techniques of archaeologists as required and modified by excavation and interpretation of historic materials; allied specialties unique to Historic Archaeology including documentary investigations and conservation and restoration of existing structures.

**ANTH 4375-6375. Archaeology of Slavery. (3).** Archaeological research to understanding slavery in New World; examination of slave experience; slave life; survival of African cultural traditions; debate of nature of domination and resistance. PREREQUISITE: ANTH 1100, 1200, 1300, or permission of instructor.

**ANTH 4411-6411. Urban Anthropology. (3).** Anthropological studies of pre-industrial and industrial cities; urbanization, movements of social transformation and other processes of adjustment to urban milieu; urban slums, ethnic enclaves and housing developments in cross-cultural perspective; urban kinship and social organization; urban community development; urban research techniques.

**ANTH 4412-6412. Neighborhood Development and Poverty. (3).** Role of various institutions and their relationship to developmental needs of inner-city neighborhoods; evolution of American cities as context for understanding urban neighborhoods and poverty; role of government and foundations in shaping policy at local level; rise of neighborhood associations and non-profits as extensions of family values; contributing to better understanding of neighborhoods and various intervention strategies.

**ANTH 4413-6413. Anthropology of Tourism. (3).** Advanced study of developing field of tourism in anthropology; explores cultural dynamics and dilemmas of tourism and tourist development; different forms of tourism (mass, elite, eco, ethnic and heritage) assessed both in terms of impacts on host culture and its environment as well as tourists themselves; tourism assessed as a development alternative, a driver of cultural change, and a form of local, regional, national, international and intercultural relations. PREREQUISITE: ANTH 1200.

**ANTH 4414-6414. Culture and Transnational Processes. (3).** Advanced study of changes in culture and economic systems beginning with early industrial capitalism through stages of integrated mass production to current restructuring of a global system; flexible mass production, regional connections, workplace innovation, international labor migration, human resources. PREREQUISITE: ANTH 1200 or 3200, or permission of instructor.

**ANTH 4420-6420. American Folklore. (3).** Selected genres of American folklore, including folk religion and belief, folk medicine, folksong and music, narrative and humor (jokes and riddles); comparisons to other cultures; emphasis on role of folklore in maintenance of tradition, in social change, and in concept of culture.

**ANTH 4511-6511. Medical Anthropology. (3).** Cross-cultural analysis of bio-behavioral components of infectious, nutritional, genetic, chronic and psychiatric diseases; individual and cultural reactions to medical care, professionals and health care delivery systems.

**ANTH 4531-6531. Alcohol, Drugs and Culture. (3).** Cross-cultural comparison of beliefs, rituals, meaning of substance use and abuse; examination of biological and cultural evidence on the origin and development of problems; implications for prevention, early intervention, and treatment.

**ANTH 4541-6541. Nutritional Anthropology. (3).** Cross-cultural comparison of human diet; assessment; cultural and health value of foods; hunger and malnutrition; acculturation and dietary change.

**ANTH 4551-6551. Culture, Sex and Childbirth. (3).** Biological, environmental, social and cultural factors influencing human reproduction; comparison of cultural and clinical perspectives on sexual orientation and behavior, sexually transmitted diseases, fertility, birth control, pregnancy, birth and post-partum care; alternative delivery systems in Western and non-Western societies.

**ANTH 4660-6660. Museum Collections. (3). (Same as ARTH 4660).** Theory and methods, collection policy, development, preservation, documentation and interpretation. PREREQUISITE: permission of instructor.

**ANTH 4661-6661. Collections Research. (3). (Same as ARTH 4661).** Object-based disciplines to museum collections research methods and application to exhibitions, catalogs, and scholarly publications. PREREQUISITE: permission of instructor.

**ANTH 4840-6840. Israel: Antiquity in Modernity. (3). (Same as JDST 4840).** Interdisciplinary examination of relationship between ancient traditions and modern issues in Israel; emphasis on relationship between historical conditions, conflicts, and interconnections, and new choices facing Israel.

**ANTH 4841-6841. Biblical Archaeology. (3). (Same as JDST 4841).** Relationship between historical texts in Hebrew Bible and historical evidence from archaeological research in Israel and surrounding area; emphasis on how archaeological evidence and biblical narratives illuminate each other.

**ANTH 4975. Directed Individual Readings. (1-3).** Intensive guided survey of anthropological and related literature; student selects a topic in consultation with a faculty member and department chair.

**ANTH 4985. Directed Individual Research. (1-3).** Intensive guided research, data analysis and presentation; student selects a topic in consultation with a faculty supervisor and department chair.

**ANTH 4990-99. Special Topics in Anthropology. (3).** Topics are varied and in online class listings. May be taken for a maximum of 6 hours credit.

## (ARAB) ARABIC

### Department of Foreign Languages and Literatures

RALPH ALBANESE, Ph.D., *Chair*

*Room 375, Dunn Hall*
*http://fl.memphis.edu*

**ARAB 1010. Elementary Arabic I. (3). (1101).** Principles of pronunciation; everyday expressions; basic sentence patterns through oral practice, writing and reading. ♦

**ARAB 1020. Elementary Arabic II. (3). (1102).** Continued study of sentence patterns through oral and written practice. PREREQUISITE: ARAB 1010 or equivalent. ♦

**ARAB 2010. Intermediate Arabic I. (3). (2201).** Continued study of sentence patterns through oral and written practice. PREREQUISITE: ARAB 1020 or equivalent. ♦

**ARAB 2020. Intermediate Arabic II. (3). (2202).** Continued study of sentence patterns through oral and written practice. PREREQUISITE: ARAB 2010 or equivalent. ♦

## (ARCH) ARCHITECTURE

### Department of Art

JAMES E. JACKSON, M.F.A., *Chair*
SHERRY L. BRYAN, M.Arch., *Coordinator*
*Room 303, Engineering Technology Building*
*http://www.people.memphis.edu/~artdept/artdept.html*

***Additional fees are charged for some Architecture courses.*** **See the online class listings or the Expenses section of the Bulletin.**

**ARCH 1500. Introduction to Architecture. (3).** Fundamental principles of architecture and design; historical, cultural, theoretical aspects of architecture and design; architecture profession values, ethics.

**ARCH 1521. Architectural Graphics Studio. (3).** Graphic communication principles in architecture; architectural concepts in physical and theoretical terms; freehand and mechanical drawing skills; abstract forms and real objects, light, shade, shadow; principles of lettering; orthographic, paraline and perspective projections; value studies; rendering techniques, drawing reproduction. PREREQUISITE: ARCH 1500, 1555, ART 1210, 1311. COREQUISITE: ARCH 1561.

**ARCH 1555. History of Architecture I. (3).** Major trends in architecture from prehistoric times to Renaissance; emphasis on impact of technological and social changes on prevailing architectural styles.

**ARCH 1556. History of Architecture II. (3).** Major trends in architecture from Renaissance to present; emphasis on pre-1900 era; development of architecture through cultural and technological change. PREREQUISITE: ARCH 1555.

**ARCH 1561. Building Technology I. (3).** Building types and building systems; emphasis on the effect of scale, materials, assembly systems and detail methods upon architectural design; drafting of details included. PREREQUISITE/COREQUISITE: ARCH 1521. **(Sp).**

**ARCH 1562. Building Technology II. (3).** Advanced study of building types and building systems; material and their properties as related to architecture; drafting of details included. PREREQUISITE: ARCH 1561.

**ARCH 2555. Architectural Design I Studio. (4).** Architectural precedents, typology, form, space, order, meaning and place; series of design problems incorporating sketching and model building. PREREQUISITE: ARCH 1521, 1556, 1561. PREREQUISITE/COREQUISITE: ARCH 1562. **(F).**

**ARCH 2556. Site and Environmental Planning Studio. (4).** Building sites; selection and utilization, including environmental influences; technical aspects such as zoning, contour lines, parking, ingress/egress, site drainage, building location and landscaping. PREREQUISITE: ARCH 2555. COREQUISITE: ARCH 3520. **(Sp).**

**ARCH 2561. Computer Applications in Architecture. (3). (TECH 2561).** Computer aided drafting and design applications to produce computer generated architectural design and working drawings. PREREQUISITE: ARCH 1521, 1561.

**ARCH 3401. Strength of Materials. (3). (Same as METH 3401).** Introduction to analysis and design of building systems and impact of these systems based upon fundamental principles of mechanics; force systems, equilibrium; axial, shear, bending stress theory; stress diagrams, buckling, strain and deformation related to building load requirements of structural systems within architectural forms. COREQUISITE: PHYS 1001, 1010.

**ARCH 3408. Industrial Materials (4). (Same as METH 3408).** Material properties and the methods and standards used in testing these properties are introduced for metals, ceramics, polymers, and composites; emphasis is placed on their mechanical properties and reinforced by testing in the laboratory. *Three lecture hours, three studio hours per week.*

**ARCH 3471. Structural Design I. (3). (TECH 3471).** Fundamentals of structural design and analysis of steel and timber buildings and building components. PREREQUISITE: ARCH 3401, MATH 1830. **[C] (F).**

**ARCH 3472. Structural Design II. (3).** Fundamentals of structural design and analysis of concrete buildings and building components. PREREQUISITE: ARCH 3401, MATH 1830. **(F).**

**ARCH 3520. Architectural Design II Studio. (4).** Basic design concepts and methods as applied to building types, design, construction, and systems for residential architecture. PREREQUISITE/COREQUISITE: ARCH 2556. **(Sp).**

**ARCH 3531. Environmental Control Systems. (3).** Studies in environmental technologies in architecture; mechanical systems, plumbing, electrical and energy conservation. PREREQUISITE: ARCH 3520. **(F).**

**ARCH 3562. Advanced Computer Applications in Design. (3).** Advanced concepts of computer generated drawings including LISP programming, tool bar customization, utilization of third part software for special applications, file referencing, 3-D building studies, site development. PREREQUISITE: ARCH 2561, or equivalent.

**ARCH 4515. Architectural Design III Studio. (4).** Design synthesis; integration of design determinants and development concepts for large and small scale commercial and institutional architecture. PREREQUISITE: ARCH 3471, 3531, 4600. PREREQUISITE/COREQUISITE: ARCH 4535.

**ARCH 4535. Professional Practice. (3).** Professional practice of architecture; case problems initiating and managing professional practice; exploration of essential elements of professional practice; administration and management, professional services of architect, contracts, codes, specifications and professional ethics. PREREQUISITE: ARCH 3520.

**ARCH 4600. Contract and Construction Drawing. (4).** Techniques and methods of portraying information needed to conform to document design decisions; development of building systems, structural and construction details required to communicate clearly and graphically a project's bidding, contracting, and construction requirements. PREREQUISITE: ARCH 3520, 3562, or equivalent.

**ARCH 4615. Architectural Design IV Studio. (4).** Design synthesis; integration of design determinants, structure, environmental controls, material and construction; independent architecture studies combined with advanced design/research thesis. PREREQUISITE: ARCH 4515. (A-F, IP)

**ARCH 4650. Parameters in Architecture Studio. (3-6).** Comprehensive overview of differences and relationships of history, technology, and culture in terms of impact on architecture and urban design; concepts of form generation and historic dimensions of architecture with respect to human settlement. May be repeated for a maximum of 6 hours credit when topic varies. PREREQUISITE: permission of instructor.

**ARCH 4651. Urban Design Studio. (3-6).** Comprehensive overview of significant issues of contemporary urban design; emphasis on experiential nature of cities, role of public policy, and genesis and development of urban building types. May be repeated for a maximum of 6 hours credit when topic varies. PREREQUISITE: permission of instructor.

**ARCH 4655. Studio - Study Abroad. (3-9).** Comparative studies of European cultures; relationships of culture to physical environment, organization of cities; history and behavior of inhabitants; analysis and documentation of elements of physical environment and relationship between buildings and urban fabric. PREREQUISITE: permission of instructor.

**ARCH 4940. Senior Thesis Seminar. (1).** Study and research in a specific area culminating in an integrating experience through individual project; research techniques, preliminary research and conceptual development of architectural project; site analysis and selection, case studies; development of Thesis proposal. PREREQUISITE: permission of instructor.

**ARCH 4944. Senior Thesis. (3).** Study and research in specific area culminating in an integrating experience through individual and/or group projects and technical reports. PREREQUISITE: ARCH 4940. (A-F, IP) **[W, I]**

**ARCH 4990-4998. Special Topics. (1-3).** Topics are varied and in online class listings. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.

## (ARMY) MILITARY SCIENCE

LIEUTENANT COLONEL GREGORY TUBBS, M.A.
*Professor of Military Science*
*Room 123A, Hayden Hall*

*http://www.people.edu/~armyrotc/*

**NOTE:** Leadership laboratory provides the forum for the reinforcement of formal classroom instruction. Lab revolves around the practical application of the theories of leadership with a "hands-on" approach to learning. Provides opportunities for cadets to exercise leadership, planning, and management skills as well as covering independent topics including: rappelling, drill and ceremonies, basic rifle marksmanship, first aid, and orienteering.

**ARMY 1100. Leadership Laboratory. (1).** *Two laboratory hours per week.* COREQUISITE: ARMY 1110.

**ARMY 1110. Introduction to Military Science. (1).** Introduction to Army ROTC with hands-on approach through several basic military skills. Lectures and practical exercises in following areas: rappelling, communications, weapons, first aid, and land navigation. There is no military obligation. COREQUISITE: ARMY 1100.

**ARMY 1115. Leadership Laboratory. (1).** *Two laboratory hours per week.* COREQUISITE: ARMY 1120.

**ARMY 1120. Leadership and Confidence Building. (2).** Basic military first aid skills; lectures and practical exercises in basic emergency treatment for fractures, lacerations, heat and cold injuries; cardiopulmonary resuscitation. THIS COURSE DOES NOT PROVIDE RED CROSS OR ANY OTHER CERTIFICATION. COREQUISITE: ARMY 1115.

**ARMY 2100. Leadership Laboratory. (1).** *Two laboratory hours per week.* COREQUISITE: ARMY 2105.

**ARMY 2105. American Military History. (3).** Developments since colonial period; emphasis on background and growth of national military and naval establishments, military and naval thought, difficulties accompanying modernization and assumption of global responsibilities, and problem of relationship between civilian and military-naval sectors in democracy. COREQUISITE: ARMY 2100.

**ARMY 2115. Leadership Laboratory. (1).** *Two laboratory hours per week.* COREQUISITE: ARMY 2120. **[G]**

**ARMY 2120. Fundamental Survival Skills. (1).** Basic Military Skills including map reading, military first aid skills and small unit leadership. *One hour weekly classroom instruction.* COREQUISITE: ARMY 2115. **[G]**

**ARMY 2140. Small Unit Tactics I. (2).** Emphasis on preparation of the individual for combat. Preparation of potential leaders in combat through study of the knowledge and skills needed by an individual soldier. Skill developed in planning and organizing by combat patrols. Course includes a series of field practicums.

**ARMY 2145. Small Unit Tactics II. (2).** Advanced concepts in reconnaissance, raid, and ambush patrolling techniques, extended patrolling operations, and application techniques for specialized equipment; leadership skills through student-led patrols. Includes series of field practicums. Expands material taught in ARMY 2140 but may be taken independently of 2140.

**ARMY 2190. Basic Camp Practicum. (1-6).** Six-week training normally taken during the summer between the second and third years by those students who have not taken previous ROTC training, or who have not completed the required basic military science courses for advanced course enrollment. Training conducted at designated U.S. Army installation and includes practical experience in leadership, small unit tactics, weapons drill, and communications under field conditions. After completion of camp, student required to complete satisfactorily an examination administered by Military Science Department. Student must register for this course following successful camp completion to receive appropriate credit. Students receive approximately $670 pay, room and board, and travel expenses. No military obligation is incurred. PREREQUISITE: Permission of Professor of Military Science

**ARMY 3100. Leadership Laboratory. (1).** *Two laboratory hours per week.* COREQUISITE: ARMY 3111.

**ARMY 3111. Applied Leadership I. (3).** Presentation, discussion, practical exercise, and field training on fundamentals of map reading and land navigation; development of skills in individual and small unit tactical planning and operations; and professional subjects in leadership, leadership assessment, and principles of war. *Three lecture hours per week, three hours physical training per week, and field training exercises on two weekends during semester.* COREQUISITE: ARMY 3100. PREREQUISITE: permission of the Professor of Military Science.

**ARMY 3115. Leadership Laboratory. (1).** *Two laboratory hours per week.* COREOUISITE: ARMY 3121.

**ARMY 3121. Applied Leadership II. (3).** Continuation of first year advanced course. COREQUISITE: ARMY 3115. PREREQUISITE: permission of the Professor of Military Science.

**ARMY 3190. Advanced Camp Practicum. (6).** Six weeks of training at an Army post, normally taken between the 1st and 2nd years of Advanced Course; practical experience in leadership, small unit tactics, U.S. Army weapon systems and equipment, and patrolling operation; examination administered by the Department of Military Science required to receive academic credit. Students must register for course following successful camp completion to receive credit. PREREQUISITE: permission of Professor of Military Science.

**ARMY 4100. Leadership Laboratory. (1).** *Two laboratory hours per week.* COREQUISITE: ARMY 4111.

**ARMY 4111. Seminar in Leadership and Planning. (3).** Leadership and management skill development in specific areas of oral and written communications, training management, personnel evaluation and counseling, personnel management systems of Army, U.S. Army logistic systems, military justice, and familiarization with ethics of military professional. This course, in conjunction with ARMY 4121, completes the cadet's preparation for commissioning as a Second Lieutenant in the Army Reserve or National Guard. *Three lecture hours every week, three hours physical training each week, and field training exercises on two weekends during semester.* COREQUISITE: ARMY 4100. PREREQUISITE: permission of the Professor of Military Science.

**ARMY 4115. Leadership Laboratory. (1).** *Two laboratory hours per week.* COREQUISITE: ARMY 4121.

**ARMY 4121. Seminar in Organizational Leadership. (3).** Continuation of second year of advanced course. COREQUISITE: ARMY 4115. PREREQUISITE: permission of the Professor of Military Science.

## (ART) ART

JAMES E. JACKSON, M.F.A., *Chair*
*Room 201, Jones Hall*

*http://www.people.memphis.edu/~artdept/artdept.html*

Transfer students seeking advanced standing in art are required to submit a portfolio.

***Additional fees are charged for some Art courses.* See the online class listings or the Expenses section of the Bulletin.**

**In addition to specific prerequisites, junior standing or permission of the instructor is a prerequisite for all 3000 and 4000 level courses in the Department of Art.**

**ART 1030. Introduction to Art. (3). (1101).** Fundamental principles of artistic expression as basis for understanding Western and non-Western traditions in the visual arts. **[G]** ♦

**ART 1204. Color Fundamentals. (3).** Light and color in relation to form. Mixing of colors and notation of hue, value, chroma relationships. Interaction of color; color harmony, psychology, and symbolism in a variety of mediums.

**ART 1210. Two-Dimensional Design. (3).** Elements and principles of visual design studies through a problem-solving approach. Encourages perceptual growth through the use of varied tools, materials, and techniques.

**ART 1215. Three-Dimensional Design. (3).** Exploration of design elements and principles as applied to development of three-dimensional construction. Imaginative and fundamental use of materials in visual problem solving. PREREQUISITE: ART 1210.

**ART 1233. Introduction to Interior Design. (3).** Processes of interior design and various aspects and considerations involved in practice of both residential and commercial design.

**ART 1234. Interior Drafting Practices. (3). (2233).** Introduction to equipment, standards and requirements of interior design drafting practices through lecture and space planning and production of working drawings.

**ART 1235. Interior Color and Composition. (3). (2234).** Application of color theory and design-composition to specific requirements of interior design practice, through lectures and studio assignments. PREREQUISITE: ART 1233, or permission of instructor.

**ART 1311. Beginning Drawing. (3).** Introduction to materials and techniques of basic drawing; study of still life and nature to develop perception of line, value, space, and volume; use of contour and gesture.

**ART 1314. Figure Structure. (3).** Use of basic drawing materials and techniques; analysis and rendering of the human form, including work from skeleton and from female or male models; study of anatomy and proportion; emphasis on contour, gesture, value, and volume. PREREQUISITE: ART 1311.

**ART 2213. Typographic Design I. (3).** Terminology, technology, and design aspects of typography for effective communication. PREREQUISITE: ART 1210 and Acceptable Incoming Evaluation for Graphic Design.

**ART 2219. Visual Thinking. (3).** Fundamental methods in generating ideas for effective visual communication. PREREQUISITE: ART 1210, 1311and Acceptable Incoming Evaluation for Graphic Design.

**ART 2223. Computer Assisted Graphic Design. (3).** Introduction to computer graphic design; overview of technical and aesthetic issues relevant to graphic design profession.

**ART 2235. Interior Construction Drafting. (3). (3237).** Principles of building construction and their application through development of working drawings for both residential and commercial projects; building methods and materials studied through lectures and studio assignments. PREREQUISITE: ART 1234, or permission of instructor.

**ART 2236. Components of Interiors. (3).** Technical aspects of surface and structural materials of interior design in relation to building codes and public health, safety and welfare. PREREQUISITE: ART 1233, or permission of instructor.

**ART 2237. Interior/Perspective Drawing. (3). (3312).** Various perspectives systems applied to one- and two-point drawing techniques for interior design. PREREQUISITE: ART 1234.

**ART 2238. CADD for Interior Design. (3).** Introduction to use of microcomputer software in production of interior design drawings and documents; exploration of computer applications in design development and presentation. PREREQUISITE: ART 1234, 1311.

**ART 2301. Digital Art I. (3).** Introduction to computer graphics and application in field of art; use of standard hardware and software to solve creative problems; exploration of current issues and computer history. PREREQUISITE: ART 1210, 1311, or permission of instructor.

**ART 2305. Principles of Time-Based Media. (3).** Study of various principles and techniques applied by cinematographers, film editors and designers to plan and produce time-based media; storyboarding and effective use of animation and sound.

**ART 2313. Drawing and Composition. (3).** Problems in visual communication; emphasis on compositional and technical considerations; analytical and objective investigations of organizational problems; use of varied graphic media and methods. PREREQUISITE: ART 1311 and 1314, or permission of instructor.

**ART 2314. Drawing and Concept. (3).** Problems in visual communication; emphasis on personal expression; conceptual and subjective investigation of individual problem-solving strategies; use of varied graphic media and methods. PREREQUISITE: ART 2313, or permission of instructor.

**ART 2331. Painting I. (3). (3331).** Preliminary course in theory and practice of oil painting. PREREQUISITE: ART 1210, 1311, or permission of instructor.

**ART 2351. Introduction to Printmaking. (3).** Printmaking processes; relief, intaglio, planography, and stencil, focusing on relief and screen printing. PREREQUISITE: ART 1210, 1311, or permission of instructor.

**ART 2352. Introduction to Intaglio and Lithography. (3).** Monochrome metal plate intaglio and stone lithography; intaglio includes etching, engraving, and acquatint; lithography includes crayon, wash, and transfer; emphasis on personal expression. PREREQUISITE: ART 1210, 1311, or permission of instructor.

**ART 2414. Primary School Art Practicum. (1).** Observation and art teaching in a local K-4 classroom; campus-based seminars. PREREQUISITE: art major and permission of instructor. (S/U).

**ART 2511. Sculpture I. (3).** Introduction to basic materials and techniques of sculpture. PREREQUISITE: ART 1215, or permission of instructor.

**ART 2523. Ceramics I. (3).** Introduction to clay and ceramic process; emphasis on thoughtful, purposeful exploration of medium, regarding both pottery vessel and nonvessel objects.

**ART 2701. Photography I. (3).** Basic techniques and processes of black and white still photography; history and aesthetics of photography as fine art; emphasis on personalized perception and seeing photographically. NOTE: Prospective students are advised to obtain a list of course expenses from the Art Department before registering.

**ART 2702. Photography II. (3). (4224).** Exploration of black and white still photography as means to personal expressive statement and self-discovery; assignments emphasize a broad range of contemporary photographic practice. PREREQUISITE: ART 2701, or permission of instructor.

**ART 3103. History of Furniture and Interiors I. (3).** Emphasis on Renaissance, Baroque, Rococo and Neo-Classical periods.

**ART 3104. History of Furniture and Interiors II. (3).** 19th and 20th century survey; emphasis on development of period revivals, Art Nouveau, Art Deco, International Style and other innovations in Europe and America.

**ART 3204. Residential Kitchen Planning. (3). (Same as CSED 3204).** Socioeconomics and design aspects of housing; kitchen planning principles: selection, use, and care of household equipment. PREREQUISITE: CSED 2104.

**ART 3213. Typographic Design II. (3).** Advanced problems involving visual organization and typography as an expressive design element. PREREQUISITE: Admission to Graphic Design concentration.

**ART 3219. Image Design. (3).** Strategies, processes and techniques for integrating verbal and visual messages in graphic communications; illustration and computer imaging. PREREQUISITE: Admission Graphic Design concentration.

**ART 3222. Graphic Design Methodology. (3).** Emphasis on intellectual processes underlying applied design. PREREQUISITE: Admission to Graphic Design concentration.

**ART 3225. Computer Graphics. (3).** Hands-on training in use of graphics hardware and software in design and production of commercial graphics, illustrations and animation.

**ART 3227. Electronic Pre-Press Production. (3).** Methods of preparing art for reproduction. PREREQUISITE: ART 3222.

**ART 3234. Interior Design Studio I. (3).** Application of material covered in basic interior design courses to theoretical designs for

complete environments; design development; production of working and presentation drawings and specifications studied through lectures and studio projects. PREREQUISITE: ART 2235, 2236, 3235, 3236, or permission of instructor.

**ART 3235. Commercial Lighting Design. (3).** Comprehensive study of lighting sources and principles, color and applications, including circuiting, switching, dimming systems, task-ambient lighting and industry resources; zonal cavity method and point source calculations applied through lectures and studio assignments. PREREQUISITE: ART 1234, 1235, 2820, and one required math course, or permission of instructor. [C]

**ART 3236. Rendering for Interiors. (3).** Comparative application of variety of techniques using black-white and color mediums for interior perspective illustration; lectures and studio assignments in line, texture, shade-shadow, volume, color and free-hand drawing. PREREQUISITE: ART 1234, 1235, 2237, or permission of instructor.

**ART 3238. Interior Detail Drawing. (3).** Design and drawing of interior millwork and casework; production and specification for construction studied through lectures and studio assignments. PREREQUISITE: ART 2235, or permission of instructor.

**ART 3250. Interior Design Studio II. (3). (4231).** Comprehensive assignment in commercial design including design development, space planning, building code requirements, and construction and specification documentation for barrier-free design studied through lectures and design assignments. PREREQUISITE: ART 3234, or permission of instructor.

**ART 3332. Painting II. (3).** Continuation of ART 2331; still-life, landscape, and portrait painting.

**ART 3351. Intaglio Printmaking. (3).** In-depth study of metal plate intaglio printmaking processes: engraving, drypoint, etching, aquatint, and color intaglio; mixed media; emphasis on personal expression. PREREQUISITE: ART 2352, or permission of instructor.

**ART 3352. Lithography (3).** In-depth study of lithography in monochrome and color from stone and aluminum plates; mixed media color printing; emphasis on personal expression. PREREQUISITE: ART 2352, or permission of instructor.

**ART 3411. Art for Children. (3).** Introduction to skills and methods for instructional art programs in studio and art appreciation activities; emphasis on materials and ideas for children's art expression and development.

**ART 3416. Middle School Art Practicum. (1).** Observation and art teaching in a local grade 5-8 classroom; campus-based seminars. PREREQUISITE: art major and permission of instructor. (S/U).

**ART 3423. Art for Secondary Schools. (3).** Studio activities and related art education issues relevant to the artistic development of adolescents; emphasis on multicultural concerns and art evaluation systems. PREREQUISITE: ART 3411, ARTH 2101, 2102, or permission of instructor.

**ART 3431. Multicultural Art and Design. (3).** Studio activities combining visual art traditions of world cultures with innovative expression; emphasis on non-European sources for contemporary art works. PREREQUISITE: ART 2313; ARTH 2101, 2102, or permission of instructor.

**ART 3511. Sculpture II. (3).** Problems of sculptural form as expressed in metal, wood, and related materials.

**ART 3512. Sculpture III. (3).** Continuation of ART 3511; emphasis on techniques.

**ART 3522. Kilns, Glazes and Technical Skills. (3).** Development and experimentation with technical skills; firing kilns, glaze preparation, technical and visual research. PREREQUISITE: ART 1210, 1311, and 2523.

**ART 3524. Ceramics II. (3).** Fundamental historical and aesthetic aspects peculiar to ceramics as a studio medium. PREREQUISITE: ART 3522, or permission of instructor.

**ART 3701. Photography III. (3).** Continuation of ART 2702. Examination of several key photographers' work as point of departure for student work; how student work relates to traditions. PREREQUISITE: ART 2702, or permission of instructor.

**ART 4010-19-6010-19. Special Topics in Studio Art. (1-3).** Topics are varied and in online class listings. May be repeated for a maximum of 9 hours credit.

**ART 4020-29-6020-29. Special Topics In Art Education. (1-3).** Topics are varied and in online class listings. May be repeated for a maximum of 9 hours credit.

**ART 4209. Digital and Motion Typography. (3).** Aesthetic and technical issues for effective typographic communication in electronic media; emphasis on relationship of form to content; special consideration of time-based presentation and impact of electronic interface.

**ART 4211-6211. Writing and the Design Process. (3).** Synthesis of verbal and visual problem-solving methods and the use of writing as integral phase of design process. PREREQUISITE: ART 3213, 3222, or permission of instructor. [W]

**ART 4221-6221. Graphic Design for Print Communications. (3).** Practical problems in areas of publication, information, corporate and promotional design. PREREQUISITE: ART 3213, 3222, or permission of instructor.

**ART 4222-6222. Interactive Multimedia for Graphic Design. (3).** Introduction to time-based, electronic media in graphic design; impact of electronic interface on visual communication; emphasis on visual design of narrative, commercial and/or educational multimedia presentations on computer. PREREQUISITE: ART 2223 and admission to Graphic Design concentration.

**ART 4223-6223. Specialized Studies In Graphic Design. (3-12).** Advanced instruction in either electronic imaging, typography and publication design, 3-dimensional design, corporate and promotional design, or information graphic design. May be repeated for a maximum of 12 hours credit when topic varies. PREREQUISITE: ART 3213, 3222, or permission of instructor.

**ART 4224-6224. History of Graphic Design. (3).** Cultural, theoretical, and stylistic aspects of major movements in the field of graphic design in Europe and America from Industrial Revolution to present. PREREQUISITE: admission to Graphic Design concentration or permission of instructor.

**ART 4230. Graphic Design Internship. (3).** Practical experience in visual communication within approved professional work environment. PREREQUISITE: ART 4221 and recommendation from advisor.

**ART 4232. Visual Design Business Practices. (3).** Application of principles, procedures, and business practices of visual design. PREREQUISITE: junior standing, or permission of instructor.

**ART 4233-6233. Design Practice Studio. (3).** Work under faculty supervision on projects for institutional and corporate clients; assist in developing publications, exhibits, signage and other graphics, and participate in professional design process from project inception to completion. May be repeated for a maximum of 12 hours credit with approval of advisor, but not for the purpose of improving a grade previously earned. Admission by portfolio review only. PREREQUISITE: senior standing.

**ART 4235. Graphic Design Portfolio Seminar. (3).** Methodology and techniques in graphic design applied to an extended visual communication project; written proposal, preparation of comprehensive layouts and oral/visual presentation of project. PREREQUISITE: art major with concentration in Graphic Design and senior status. [I]

**ART 4238. Interior Design Studio III. (3).** Further advanced studio assignments in commercial interior design studied through lectures and design projects. PREREQUISITE: ART 3235, 3250, or permission of instructor.

**ART 4239. Interior Design Business Practices. (3).** History and organization of interior design profession; study of business methods and practices; formulation of resume and design portfolio. PREREQUISITE: ART 3234, or permission of instructor.

**ART 4240-6240. Interior Design Internship. (3).** Supervised apprenticeship in interior design industry. Placement requires approval of

Interior Design faculty. PREREQUISITE: ART 3234 and permission of instructor.

**ART 4250. Interior Design Senior Project Seminar. (1).** Study and research in specific area of interior design resulting in program brief for ART 4251. PREREQUISITE: ART 4238 and permission of instructor.

**ART 4251. Interior Design Senior Project. (3).** Creative, professional, technical, and historical issues involved in problem chosen and defined by student. Culminates in formal presentation of unique solution to problem. PREREQUISITE: ART 4820, or permission of instructor. [I]

**ART 4321-6321. Drawing and Painting I. (3).** Advanced drawing and painting methods; emphasis on transparent watercolor. PREREQUISITE: ART 2313, or permission of instructor.

**ART 4322-6322. Drawing and Painting II. (3).** Continuation of ART 4321. Attention to various mixed media. PREREQUISITE: ART 2313, 4321, or permission of instructor.

**ART 4331-6331. Painting III. (3).** Advanced problems in oil; experimental approach to subject. PREREQUISITE: ART 2331, 3332, or permission of instructor.

**ART 4332-6332. Painting IV. (3).** Continuation of ART 4331. Emphasis on development of personal style. PREREQUISITE: ART 2331, 3332, 4331, or permission of instructor.

**ART 4351-6351. Advanced Printmaking I. (3).** Specialization in one or two printmaking media with emphasis on development of personal imagery and technical skills. PREREQUISITE: ART 2351, 3351 or 3352, or permission of instructor.

**ART 4352-6352. Advanced Printmaking II. (3).** Advanced work in one or two printmaking media with continued development of personal imagery and advanced technical skills. PREREQUISITE: ART 2351, 3351 or 3352, and 4351, or permission of instructor.

**ART 4353-6353. Computer Imaging in Printmaking/Photography I. (3).** Use of digital imaging in one of several output options including: lithography, screenprinting, etching, silver and non-silver photographic processes; emphasis on personal expression. PREREQUISITE: computer course and either of the following: ART 2701, 2351, or permission of instructor.

**ART 4354-6354. Computer Imaging in Printmaking/Photography II. (1-3).** Advanced project using digital imaging. Proposal for study to be approved in advance; emphasis on personal expression. May be repeated for a maximum of 6 hours credit. PREREQUISITE: ART 4353, or permission of instructor.

**ART 4410-6410. Art Education Independent Study. (1-3).** Theoretical and pragmatic ideas relevant to teaching of art. May be repeated for a maximum of 6 hours credit. PREREQUISITE: ART 3411, 3423, or permission of instructor.

**ART 4418. High School Art Practicum. (1).** Observation and art teaching in a local 9-12 classroom; campus-based seminars. PREREQUISITE: art major and permission of instructor. (S/U).

**ART 4427. Methods and Materials for Art Instruction. (3).** Curriculum planning, resources, and standards for art program goals, budget, and facilities; current art education philosophy and research. PREREQUISITE: ART 2414, 3416, 3423, or permission of instructor.

**ART 4511-6511. Sculpture IV. (3).** Advanced work in various sculptural media. PREREQUISITE: ART 2511, 3511, 3512, or permission of instructor.

**ART 4512-6512. Sculpture V. (3).** Continuation of 4511. Emphasis on personal expression. PREREQUISITE: ART 4511, or permission of instructor.

**ART 4521-6521. Ceramics III. (3).** Advanced studies in ceramic process and technique; concentration on development of personal attitudes toward work. PREREQUISITE: ART 3524, or permission of instructor.

**ART 4522. Ceramics IV. (3).** Technical competence and the production of ceramic objects reflective of genuinely personal involvement. PREREQUISITE: ART 4521, or permission of instructor.

**ART 4610. Senior Studio. (3).** Studio production and associated research that interrelates historical, technical, and aesthetic components of visual art; contract for study project to be approved by instructor and faculty committee in semester prior to registration. PREREQUISITE: Art major and senior status with concentration in Art Education, Ceramics/Painting/ Printmaking/ Sculpture, or Photography. [I]

**ART 4621-6621. Workshop In Art I. (1-3).** Specific art problems as they apply to individual student; emphasis on basic art concepts and creative experience. PREREQUISITE: permission of instructor.

**ART 4622-6622. Workshop in Art II. (1-3).** Continuation of ART 4621. Study of problems appropriate to need of individual student. PREREQUISITE: permission of instructor.

**ART 4641-6641. Study and Travel In Art. (3 or 6).** Travel to important art areas of world and specialized study under direction of faculty member of Department of Art.

**ART 4650-6650. Professional Art Practices. (3).** Development of skills needed for success as practicing professional artist; portfolio preparation and presentation; marketing, contracts, copyrights, and alternative art careers.

**ART 4701-6701. Color Photography. (3).** Exploration of photographic perception in color; survey of history and aesthetics of color photography; techniques of color photography; emphasis on color printing. PREREQUISITE: ART 3701, junior standing, or permission of instructor.

**ART 4702-6702. Photographic Materials and Processes. (3).** Advanced technical course exploring creative potential in various contemporary photography materials, processes and techniques; emphasis on aesthetic application of those materials and techniques. PREREQUISITE: ART 3701, or permission of instructor.

**ART 4703-6703. Alternative Photographic Processes. (3).** Exploration of creative potential of archaic and non-traditional photographic processes such as Cyanotype, Gum Bichromate and Kwik-Print. PREREQUISITE: ART 3701, or permission of instructor.

**ART 4704-6704. Photographic Lighting. (3).** Advanced theory, technique, and equipment used by professional photographers for black and white and color; emphasis on aesthetic application in actual practice. PREREQUISITE: ART 3701, or permission of instructor.

**ART 4711. Advanced Photography Seminar. (1-3).** Creation of a unified body of photographic work based on subject matter or formal problem. Contract for study project to be approved by instructor in semester prior to registration. May be repeated for a maximum of 6 hours credit. PREREQUISITE: ART 3701, or permission of instructor.

**ART 4712. Photography Portfolio Seminar. (1-3).** Creation and production of bound book or portfolio containing student's photographs and written introduction. Contract for study project to be approved by instructor in semester prior to registration. May be repeated for a maximum of 6 hours credit. PREREQUISITE: ART 4711, or permission of instructor.

## (ARTH) ART HISTORY

### Department of Art

JAMES E. JACKSON, M.F.A., *Chair*
*Room 201, Jones Hall*

*http://www.people.memphis.edu/~artdept/artdept.html*

**ARTH 2101. World Art I. (3).** Development of visual arts from prehistoric times through medieval period, their use by man as social, cultural, and educational force; brief survey of art of Far East.

**ARTH 2102. World Art II. (3).** Continues World Art I; development of visual arts from medieval period through Renaissance to present.

**ARTH 4030-39-6030-39. Special Topics in Art History. (1-3).** Topics are varied and in online class listings. May be repeated for a maximum of 9 hours credit.

**ARTH 4111-6111. Art and Archaeology of Egypt. (3).** Predynastic to Late Period. PREREQUISITE: ARTH 2101, or permission of instructor. **[W]**

**ARTH 4112-6112. Egyptian Art and Archaeology in the Old and Middle Kingdom. (3).** Art, architecture, and archaeology, 3000-1500 B.C. PREREQUISITE: ARTH 2101, or permission of instructor.

**ARTH 4113-6113. Egyptian Art and Archaeology in the New Kingdom and Late Period. (3).** Art, architecture, and archaeology, 1500 B.C.-642 A.D. PREREQUISITE: ARTH 2101, or permission of instructor.

**ARTH 4121-6121. Ancient Art of the Near East. (3).** Architecture, sculpture, painting, and the minor arts in Mesopotamia, Anatolia, and Syria-Palestine. PREREQUISITE: ARTH 2101, or permission of instructor.

**ARTH 4123-6123. Greek Art. (3).** Architecture, sculpture and painting from the Bronze Age to the end of the Hellenistic period.

**ARTH 4124-6124. Roman Art. (3).** Architecture, sculpture and painting from Etruscan Rome to the fall of the Empire.

**ARTH 4125-6125. Art and Archaeology of Pompeii. (3).** Pompeii's excavations, art, artifacts and architecture in reconstructing ancient Roman daily life. **[W]**

**ARTH 4129-6129. Studies In Ancient and Medieval Architecture. (3).** Selected topics comparing the architecture of ancient Egypt, the Classical world, and Medieval Europe. PREREQUISITE: ARTH 2101. **[C]**

**ARTH 4130-6130. Art of the Medieval World. (3).** Architecture, sculpture, and painting, including manuscript illumination of the middle ages; Western European and Byzantine traditions. PREREQUISITE: ARTH 2101, or permission of instructor. **[W]**

**ARTH 4131-6131. Art of the Early Middle Ages. (3).** Advanced study of architecture, sculpture and painting of the early medieval period. PREREQUISITE: ARTH 2101, or permission of instructor.

**ARTH 4134-6134. Art of High Middle Ages (3).** Advanced study of architecture, sculpture and painting, including manuscript illumination, ivories and stained glass in the Romanesque and Gothic periods. PREREQUISITE: ARTH 2101, or permission of instructor.

**ARTH 4141-6141. Art of the Early Renaissance in Italy. (3).** Architecture, sculpture and painting of Italy, 1300-1510. PREREQUISITE: ARTH 2101, or permission of instructor.

**ARTH 4142-6142. Northern Renaissance Art. (3).** Fifteenth Century Art in Northern Europe; emphasis on panel painting, manuscript illumination and printmaking. PREREQUISITE: ARTH 2101, or permission of instructor.

**ARTH 4143-6143. Art of the High Renaissance in Italy. (3).** Sixteenth Century Art in Italy; highlights works of Michelangelo, Raphael, Titian, and the Mannerists. PREREQUISITE: ARTH 2102, or permission of instructor. **[W]**

**ARTH 4146-6146. Baroque Art. (3).** Architecture, sculpture, and painting produced in Europe during Seventeenth Century. PREREQUISITE: ARTH 2102, or permission of instructor.

**ARTH 4148-6148. Neo-Classicism and Romanticism. (3).** Western European art, ca. 1760-1850 emphasizing painting, sculpture, and art theory. PREREQUISITE: ARTH 2102, or permission of instructor.

**ARTH 4149-6149. Realism and Impressionism. (3).** Western European art, ca. 1850-1880, emphasizing painting, sculpture and art theory. PREREQUISITE: ARTH 2102, or permission of instructor.

**ARTH 4152-6152. Early Modern Art. (3).** Movements in Western art and art theory, 1880-1905 which are the foundation of 20th century modernism, Symbolism and Post-Impressionism. PREREQUISITE: ARTH 2102, or permission of instructor.

**ARTH 4153-6153. Cubism through Surrealism. (3).** History of avant-garde art before World War II. PREREQUISITE: ARTH 2102, or permission of instructor.

**ARTH 4155-6155. High Modern Art. (3).** American and European art and art theory 1940-1968, emphasizing the development of modernism. PREREQUISITE: ARTH 2102, or permission of instructor.

**ARTH 4157-6157. Contemporary Art. (3).** Historical movements in art, 1968 to present. PREREQUISTE ARTH 2102, or permission of instructor.

**ARTH 4158-6158. Modern Architecture. (3).** Survey of 19th century styles, 20th century masters, and contemporary developments in architecture; historic preservation.

**ARTH 4160-6160. Architecture and Nature. (3).** Survey and analysis of spaces in a variety of cultures from world history where the relationship between the natural and the built environment is healthy.

**ARTH 4162-6162. Latin American Art. (3).** Hispanic arts of the Americas from 1500 to the present in relation to Iberian and Indian traditions.

**ARTH 4163-6163. Pre-Columbian Art. (3).** Ancient art of Mexico, Central America and South America from about 1000 B. C. to European contact.

**ARTH 4166-6166. Social History of American Art. (3).** American art examined in social, cultural and historical contexts; broad range of creative expression, including fine arts, architecture, folk art, film, furniture, popular culture; covers the period of conquest to modern developments. PREREQUISITE: ARTH 2102, or permission of instructor.

**ARTH 4181-6181. Traditional Arts of Africa, Oceania and North America. (3).** Survey of the arts created by native Americans of U.S. and Canada, peoples of sub-Saharan Africa and Pacific islands, examined in relation to their cultural context and heritage.

**ARTH 4183-6183. Visual Arts of Africa. (3).** Survey of the arts of the African continent from the pre-historic to the modern era; African aesthetic traditions examined in relation to social and cultural contexts.

**ARTH 4185-6185. African American Art. (3).** Visual expression and culture from the Colonial to modern era, including fine arts, photography, film and popular culture.

**ARTH 4195. Proseminar in Art History. (3).** Investigation of selected topics in art history with emphasis on development of research techniques and methodologies. Oral presentation and writing of thesis paper. PREREQUISITE: senior status with 18 semester hours in art history **[I]**

**ARTH 4381-6381. Art Curatorial Techniques. (3).** Curatorial responsibilities and functions: receiving and shipping methods, registration, physical and environmental security, research, conservation, and study of art market and publications.

**ARTH 4660-6660. Museum Collections. (3). (Same as ANTH 4660).** Theory and methods, collection policy, development, preservation, documentation and interpretation. PREREQUISITE: permission of instructor.

**ARTH 4661-6661. Collections Research. (3). (Same as ANTH 4661).** Object-based disciplines to museum collections research methods and application to exhibitions, catalogs, and scholarly publications. PREREQUISITE: permission of instructor.

**ARTH 4721-6721. History of Photography I. (3).** Historical and critical issues from photography's prehistory to World War I.

**ARTH 4722-6722. History of Photography II. (3).** Historical and critical issues in photography from World War I to the present. **[W]**

## (BA) BUSINESS ADMINISTRATION

COY A. JONES, Ph.D., *Interim Dean for Academic Programs*

*Room 426, Fogelman College of Business and Economics Administration Building*

**Students must have junior standing and have met specific course prerequisites with a minimum grade of "C" (2.0) to be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of "C" (2.0) in each; (2) minimum of 2.25 GPA in all required lower division business**

**courses and MATH 1830, and (3) 55 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements).**

**A surcharge of $10.00 per credit hour for 3000 and 4000 level courses and $20.00 per credit hour for 6000-9000 level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).**

**BA 4900. Practicum In Research. (1-3).** Actual problem-solving research activities in business and economics. Student assigned to project either being conducted currently by faculty member or one developed under supervision of faculty member. Whenever possible, project within student's major field of study. PREREQUISITE: senior status.

**BA 4911. Internship In International Business. (1-6). (4000).** Practical operations of international business. Students placed for 1-8 month period with cooperating business firm operating in fields of international banking and finance, transportation, management, marketing or accounting. Academic credit granted upon certification of satisfactory performance by cooperating business firm and upon acceptance by faculty of written research report by student.

## (BIOL) BIOLOGY

JERRY O. WOLFF, Ph.D., *Chair*
*Room 103, Ellington Hall*

*http://www.people.memphis.edu/~biology*

**Effective Fall 1996, the Biology Department was reorganized into two departments: (1) Biology and (2) Microbiology and Molecular Cell Sciences (MMCS). Additional biological science courses are listed under the Microbiology and Molecular Cell Sciences (MMCS) departmental heading.**

*Additional fees are charged for some Biology lecture and laboratory courses.* **See the online class listings or the Expenses section of the Bulletin.**

**BIOL 1010. Introduction to Biology I. (3). (1071, 1061). (Same as MMCS 1010).** See MMCS 1010 for description. [G] ♦

**BIOL 1011. Introduction to Biology I Laboratory. (1) (1072, 1062). (Same as MMCS 1011).** See MMCS 1011 for description. [G] ♦

**BIOL 1020. Introduction to Biology II. (3) (1081, 1051).** Continuation of general overview of life; emphasis on structure and function of organisms and biosphere. NOTE: Credit will not apply toward a major or minor in the sciences, nor will it satisfy any part of science requirements for pre-professional curricula. *Three lecture hours per week.* [G] ♦

**BIOL 1021. Introduction to Biology II Laboratory. (1) (1082, 1052).** Laboratory observations, demonstrations and experiments designed to apply scientific methods to lecture subjects. *Two laboratory hours per week.* PREREQUISITE or COREQUISITE: BIOL 1020. [G] ♦

**BIOL 1110. General Biology 1. (3). (1151, 1111). (Same as MMCS 1110).** See MMCS 1110 for description. [G] ♦

**BIOL 1111. General Biology I Laboratory. (1). (1152, 1111 lab). (Same as MMCS 1111).** See MMCS 1111 for description. [G] ♦

**BIOL 1120. General Biology II. (3). (1161).** Continuation of BIOL 1110 or MMCS 1110 with emphasis on evolution, plant and animal diversity, structure, functions, and ecology of organisms. NOTE: course designed for students majoring in the natural sciences or pursuing a pre-professional program. *Three lecture hours per week.* PREREQUISITE: minimum grade of "C" in BIOL 1110/1111 or MMCS 1110/1111. [G] ♦

**BIOL 1121. General Biology II Laboratory. (1). (1162).** Laboratory observations, demonstrations and experiments designed to apply scientific methods to lecture subjects. *Two laboratory hours per week.* PREREQUISITE or COREQUISITE: BIOL 1120. [G] ♦

**BIOL 2010. Anatomy and Physiology I. (3). (1751).** Detailed study of structure and functions of human organism; credit not acceptable for Biology major or minor. *Three lecture hours per week.*

**BIOL 2011. Anatomy and Physiology I Laboratory. (1). (1752).** Laboratory observations, demonstrations and experiments designed to apply scientific methods to lecture subjects. *Two laboratory hours per week.* PREREQUISITE or COREQUISITE: BIOL 2010.

**BIOL 2020. Anatomy and Physiology II. (3). (1761).** Continuation of BIOL 2010; credit not acceptable for Biology major or minor. *Three lecture hours per week.*

**BIOL 2021. Anatomy and Physiology II Laboratory. (1). (1762).** Laboratory observations, demonstrations and experiments designed to apply scientific methods to lecture subjects. *Two laboratory hours per week.* PREREQUISITE or COREQUISITE: BIOL 2020.

Students must complete BIOL/MMCS 1110/1111, BIOL 1120/ 1121 before enrolling in any upper division course that is accepted as credit toward a biology major or minor.

**BIOL 3030. Principles of Animal Physiology. (4).** Basic concepts of animal function, including study of many invertebrate phyla and most classes of vertebrate organisms. *Two lecture hours, four laboratory hours per week.* PREREQUISITE: 8 hours of animal biology or equivalent. COREQUISITE: CHEM 3311.

**BIOL 3050. General Ecology. (4).** Relationships between organisms and their environment; emphasis on fundamental principles; topics include: nutrient cycles, limiting factors, population dynamics, community succession and structure, species interactions, and human ecology. *Two lecture hours, four laboratory hours per week.* **[W,C]**

**BIOL 3072. Genetics. (3).** Principles of heredity, including classical, microbial, molecular, and population genetics. *Three lecture hours per week.* PREREQUISITE: 16 hours in the biological sciences (BIOL and MMCS), including MMCS 3130 or 3500. **[I,C]**

**BIOL 3073. Genetics Laboratory. (1).** Laboratory experiments in classical, microbial, molecular, and population genetics designed to illustrate principles of heredity. *Three laboratory hours per week.* PREREQUISITE or COREQUISITE: BIOL 3072, or equivalent.

**BIOL 3200. General Botany. (4).** Structure, function and diversity of plants. *Two lecture hours, four laboratory hours per week.*

**BIOL 3220. General Plant Anatomy. (4).** Comparative development and structure of roots, stems, and leaves in flowering plants. *Two lecture hours, four laboratory hours per week.* PREREQUISITE: BIOL 3200, or permission of instructor.

**BIOL 3230. Plant Physiology. (4).** Principles of physiology and application to living organisms; emphasis on higher plants. *Three lecture hours, three laboratory hours per week.*

**BIOL 3610. Vertebrate Embryology. (4).** Development of selected vertebrate embryos from fertilized egg cell. *Two lecture, four laboratory hours per week.*

**BIOL 3620. Comparative Anatomy of Vertebrates. (5).** Origin, development, structure, and functions of organs and systems of selected forms of vertebrates. *Two lecture hours, six laboratory hours per week.*

**BIOL 3730. Vertebrate Physiology. (4).** Normal function of the organ systems of vertebrates, with an emphasis on mammals. *Three lecture hours, two laboratory hours per week.*

**BIOL 3751. Vertebrate Zoology. (2).** Life histories, adaptations, ecology, distribution, behavior, and classification of vertebrates. *Two lecture hours per week.* COREQUISITE: BIOL 3752.

**BIOL 3752. Vertebrate Zoology Laboratory. (2).** Laboratory observations, demonstrations, and experiments designed to apply scientific methods to lecture subjects. *Four laboratory hours per week.* COREQUISITE: BIOL 3751.

**BIOL 3800. Parasitology. (4).** Distribution, morphology, life history, economic importance, and control of some of parasites of man and domestic animals; protozoa through helminths. *Two lecture hours, four laboratory hours per week.*

**BIOL 3960. Medical Entomology. (4).** Distribution, morphology, life history, medical importance, and control of insects and other arthropods that serve as vectors for disease-producing organisms. *Two lecture hours, four laboratory hours per week.*

**BIOL 4000. Research I. (1-2).** Consultation, reading, and laboratory and/or field work in a selected area of biology under supervision of faculty member. No more than five total credit hours of research and practicum (BIOL 4000, BIOL 4001, BIOL 4570, and MMCS 4000) can be applied toward degree requirements. (S/U).

**BIOL 4001. Research II. (2-3).** Laboratory and/or field work in a selected area of biology under supervision of a faculty member; formal paper and presentation of research results at a professional meeting or departmental seminar required. No more than five total credit hours of research and practicum (BIOL 4000, BIOL 4001, BIOL 4570, and MMCS 4000) can be applied toward degree requirements. Prerequisite: BIOL 4000. (S/U).

**BIOL 4002-6002. Toxicology. (3).** Effects of foreign substances on biological mechanisms; absorption, excretion, metabolism, and biotransformation of potentially harmful substances. *Three lecture hours per week.* PREREQUISITE: a course in physiology and CHEM 3312.

**BIOL 4050-6050. Field Technique In Ecology. (4).** Field techniques of applied ecology covering practical training in forest, field, aquatic, and atmospheric sampling and analysis; extended field trips. *Two lecture hours, four laboratory hours per week.* PREREQUISITE: permission of instructor.

**BIOL 4053-6053. Plant Ecology. (4).** Relationships of plants and environmental factors at physiological, population, and community scales; study of ecosystem dynamics at local and landscape scales; emphasis on field techniques. *Two lecture hours, four laboratory hours per week.* PREREQUISITE: BIOL 3050.

**BIOL 4054-6054. Wetland Ecology. (4).** Study of wetlands and wetland resources; attributes of hydrology, biogeochemistry and wetland plants with emphasis on bottomland hardwood forests. *Two lecture hours, four laboratory hours per week.* PREREQUISITE: BIOL 3050 and permission of instructor.

**BIOL 4055-6055. Ecological and Environmental Issues. (3).** Ecological perspective on current environmental issues such as conservation and biodiversity, global climatic change, regulation of chemicals in environment. *Three lecture hours per week.* PREREQUISITE: BIOL 3050, or permission of instructor.

**BIOL 4056-6056. Tropical Ecology. (4).** Lecture and field intensive course in ecology of the tropics. International travel required for laboratory portion of course. *Two lecture hours, four laboratory hours per week.* PREREQUISITE: BIOL 3050.

**BIOL 4060-6060. Limnology. (4).** Physical and chemical attributes of lakes, ponds, and streams; organisms of fresh water, problems of production, practical training in limnological methods and identification of organisms. *Two lecture hours, four laboratory hours per week.* PREREQUISITE: CHEM 1110, 1111, 1120, 1121.

**BIOL 4090-99-6090-99. Special Topics in Biology. (1-3).** Topics are varied and in online class listings. May be repeated for a maximum of 4 hours credit. PREREQUISITE: junior standing and permission of instructor.

**BIOL 4071-6071. Human Genetics. (3). (3071).** Genetic principles as applied to humans; pedigree analysis, genetic counseling, cancer, and genomics. *Three lecture hours per week.* PREREQUISITE: BIOL 3072.

**BIOL 4100-6100. Evolution. (3).** Synthesis of principles and concepts of modern evolutionary theory; geologic evolution, biological evaluation, and evolution of societies; emphasis on recent development and current controversies. *Three lecture hours per week.*

**BIOL 4570. Practicum in Biology. (3).** Directed extra-departmental studies in special areas of biology. No more than five total credit hours of research and practicum (BIOL 4000, BIOL 4001, BIOL 4570, and MMCS 4000) can be applied toward degree requirements. PREREQUISITE:: BIOL 3050 and approval from Undergraduate Studies Committee. (S/U).

**BIOL 4604-6604. Animal Behavior. (4).** Animal behavior, primarily from ecological, physiological, developmental and evolutionary perspective. *Two lecture hours, two laboratory hours per week.*

**BIOL 4610. Honors Senior Seminar. (1).** Seminar attendance, reading, discussing and presenting specialized topics in biology. No more than one credit hour of seminar may be applied toward degree requirements. PREREQUISITE: senior standing, permission of instructor and Director of University Honors Program. (S/U)

**BIOL 4630-6630. General Endocrinology. (3).** Anatomy and physiology of the organs of internal secretion; role of hormones in metabolism and development. PREREQUISITE: an upper division physiology course.

**BIOL 4640-6640. Ornithology. (4).** Biology of birds, with emphasis on avian anatomy, physiology, behavior, and reproductive biology. Field trips emphasize identification of local species and techniques of field study. *Two lecture hours, four field/laboratory hours per week.*

**BIOL 4644-6644. Ichthyology. (4).** Collection, preservation, identification, life histories, management, and economic importance of fishes. *Two lecture hours, four laboratory hours per week.*

**BIOL 4651-6651. Field Techniques of Vertebrate Zoology. (4-6).** Techniques in field study of vertebrates. Extended field studies outside local area.

**BIOL 4740-6740. Mammalogy. (4).** Classification, distribution, life histories. economic importance, techniques of field study, methods of collection and preservation of mammals. *Two lecture hours, four laboratory hours per week.*

**BIOL 4744-6744. Herpetology. (4).** Classification, distribution, life histories, techniques of collection and preservation, and natural habitats of North American reptiles and amphibians. *Two lecture hours, four laboratory hours per week.*

**BIOL 4840. Invertebrate Zoology. (4). (3840).** Invertebrate phyla with emphasis on phylogeny, embryology, and ecology of selected groups; extended field trip. *Two lecture hours, four laboratory hours per week.* PREREQUISITE: permission of instructor.

**BIOL 4900-6900. Entomology. (4). (3900).** Morphology, physiology, behavior and ecology of insects. *Three lecture hours, two laboratory hours per week.*

**BIOL 4930-6930. Insect Physiology. (4).** Physiology as applied to life processes of insects. *Two lecture hours, four laboratory hours per week.*

**The following courses are taught only at the Gulf Coast Research Lab, Ocean Springs, Mississippi. The University of Memphis residence credit is given through affiliation with the laboratory.**

**BIOL 4010-6010. Aquaculture. (6).** Review of technology, principles, and problems relating to the science of aquaculture with emphasis on culture of marine species. PREREQUISITE: 16 hours of zoology including invertebrate and vertebrate zoology or ichthyology.

**BIOL 4020-6020. Comparative Histology of Marine Organisms. (1-6).** Histological organization of representative marine organisms. Fixation, processing, and study of tissues using light microscopy, transmission and scanning electron microscopy. Structural changes and physiological changes during life cycle of organism including histopathology. PREREQUISITE: permission of instructor.

**BIOL 4051-6051. Marine Ecology. (5).** Relationship of marine organisms to environment includes effects of temperature, salinity, light, nutrient concentration, currents, food, predation and competition on the abundance and distribution of marine organisms. PREREQUISITE: 16 hours of biology including general zoology, general botany, and invertebrate zoology.

**BIOL 4052-6052. Salt Marsh Plant Ecology. (4).** Emphasis on botanical aspects of local marshes; includes plant identification, composition, structure, distribution and development of coastal marshes; biological and physical interrelationships; primary productivity and relation of marshes to estuaries and associated fauna. PREREQUISITE: general

botany, plant taxonomy, plant physiology, and general ecology, or permission of instructor.

**BIOL 4200-6200. Marine Botany. (4).** Local examples of principal groups of marine algae and maritime flowering plants, treating structure, reproduction, distribution, identification and ecology. PREREQUISITE: ten hours of biology, including introductory botany.

**BIOL 4300-6300. Coastal Vegetation. (3).** General and specific aspects of coastal vegetation; emphasis on local examples. PREREQUISITE: 10 hours of biology including general botany.

**BIOL 4500-6500. Marine Microbiology. (5).** Role of microorganisms in overall ecology of oceans and estuaries. PREREQUISITE: general microbiology and environmental microbiology, or permission of instructor.

**BIOL 4600-6600. Marine Vertebrate Zoology and Ichthyology. (6).** Marine Chordata, including lower groups of mammals and birds; emphasis on fishes. PREREQUISITE: sixteen semester hours of zoology including comparative anatomy, or permission of instructor.

**BIOL 4610-6610. Early Life History of Marine Fishes. (4).** Reproductive strategies and developmental processes of marine fishes; temporal and spatial distribution patterns, population dynamics, and ecological interactions of fish eggs and larvae; methods of sampling and identifying eggs and larvae. PREREQUISITE: ichthyology, fisheries, biology, ecology, and/or permission of instructor.

**BIOL 4646-6646. Marine Fisheries Management. (4).** Overview of practical marine fishery management problems. PREREQUISITE: permission of instructor.

**BIOL 4700-6700. Behavior and Neurobiology of Marine Animals. (4).** Behavior, neuroanatomy, and neurophysiology of marine animals with emphasis on neural mechanisms underlying behavior of selected invertebrates, fishes, birds and mammals. PREREQUISITE: 16 hours of zoology and/or psychology, or permission of instructor.

**BIOL 4800-6800. Marine Invertebrate Zoology. (6).** Important free-living, marine estuarine invertebrates of the Mississippi Sound and adjacent continental shelf of the northeastern Gulf of Mexico, emphasis on structure, classification, phylogenic relationships, larval development and functional processes. PREREQUISITE: 16 hours of zoology including introductory invertebrate zoology.

**BIOL 4844-6844. Parasites of Marine Animals. (6).** Parasites of marine animals; emphasis on morphology, taxonomy, life histories and host-parasite relationships. Lecture, laboratory and field work included. PREREQUISITE: general parasitology, or permission of instructor.

**BIOL 4850-6850. Fauna and Faunistic Ecology of Tidal Marshes. (4).** Survey and discussion of taxonomy, distribution, trophic relationships, reproductive strategies and adaptation of tidal marsh animals; emphasis on those occurring in northern Gulf marshes. PREREQUISITE: 16 hours of biology and junior standing, or permission of instructor.

## (BIOM) BIOMEDICAL ENGINEERING

EUGENE C. ECKSTEIN, Ph.D., *Chair*
*Room 330, Engineering Technology Building*
*http://memphis.mecca.org/BME/*

The Department of Biomedical Engineering at The University of Memphis and the School of Biomedical Engineering at The University of Tennessee, Health Science Center participate in the Joint Program in Biomedical Engineering. The Joint Program offers graduate degrees leading to a Master of Science and a Doctor of Philosophy in Biomedical Engineering.

Undergraduate and graduate level engineering courses require an additional $20 per credit hour.

**BIOM 1710. Introduction to Biomedical Engineering and Biotechnology. (3).** General engineering problem solving, design methods, ethics with emphasis on biomedical and biotechnology applications; individual and group design projects. PREREQUISITE: MATH 1710 or 1730.

**BIOM 1720. Introduction to Biomedical Engineering Tools. (3).** Use of computer tools for data analysis, presentation, documentation; introduction to programming; individual and group design projects. PREREQUISITE: BIOM 1710.

**BIOM 4205-6205. Introduction to Chemical Sensors and Biosensors. (3).** Measurement techniques, recognition processes; application of chemical sensors and biosensors for analysis of real samples.

**BIOM 4210. Research Studies. (1-3).** Consultation, reading, laboratory and design work to investigate selected areas of biomedical engineering under supervision of faculty member; emphasis on laboratory work, design, and scientific writing. Formal paper required. PREREQUISITE: permission of instructor.

**BIOM 4900-19-6900-19. Special Topics in Biomedical Engineering. (1-3).** Topics are varied and in online class listings.

## (CCFA) COMMUNICATION and FINE ARTS

RICHARD RANTA, Ph.D., *Dean*
*Room 234, Communication and Fine Arts Building*

**CCFA 3001. Arts in Education. (3).** Integrates art, music, and drama with other subject areas to stimulate creativity and build positive attitudes.

Students who wish to apply for credit for experiential learning may obtain guidelines from the Dean of the College of Communication and Fine Arts. Fees for this credit are listed in Fees and Charges.

**CCFA 4001-6001. Arts in the Schools Institute. (1).** Provides West Tennessee educators the opportunity to discover and explore the impact of aesthetic education; students will view performances and exhibits and experience in-depth, hands-on exploratory workshops led by teaching artists.

## (CETH) COMPUTER ENGINEERING TECHNOLOGY

### Department of Engineering Technology

RONALD LEE DAY, M.A., *Chair*
*Room 203, Engineering Technology Building*
*http://www.people.memphis.edu/~engtech/home.html*

**CETH 1211. Computer Programming. (3).** Computer usage in engineering technology; emphasis on use of computer programming in solving technical problems using C. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: TECH 1010 and MATH 1730.

**CETH 2230. Pulse and Digital Circuits. (4).** Analysis and design of pulse and digital electronic circuits using discrete transistors. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: EETH 2821 and MATH 1910.

**CETH 2251. Advanced Programming Techniques. (4).** Principles of computer programming applicable to engineering technology using C++; algorithmic problem solving, coding in a structured high level language, subprograms and parameters, control structures, I/O, complex arithmetic, and double precision operations emphasized. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: CETH 1211. COREQUISITE: TECH 3044.

**CETH 2261. Data Structures. (4).** Application of high speed digital computer to problems associated with storage and retrieval of numeric and non-numeric data in engineering systems. Includes representation and organization for storing of data, searching and sorting techniques, decision tables, and file maintenance techniques. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: CETH 2251.

**CETH 3232. Digital Technology. (4).** Numbering systems and codes, logic gates, Boolean algebra, Combinational logic, TTL circuits, and memory devices. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: EETH 1811.

**CETH 3233. Microprocessor Technology. (4).** Computer history and architecture; microprocessor and microcomputer operation; fetching and executing instructions; microcode; microprocessor registers;

memory addressing modes; assembly-language instructions; assembler operation. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: CETH 1211 and 3232, EETH 2821.

**CETH 3251. Assembly Language Programming. (4).** Microcomputer programming using assembly language instructions, DOS function calls, and BIOS functions; microprocessor architecture; using an assembler to create executable files from assembly language programs; test and graphic displays using assembly language programs; application programs for input-output devices. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: CETH 3233.

**CETH 3281. Computer Aided Circuit Design. (4).** Utilization of commercially available software for electronic circuit documentation, analysis and design; emphasis on schematic capture, printed-circuit board design, and circuit simulation. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: EETH 2831.

**CETH 4234. Microprocessor Interfacing Technology. (4).** Analysis and design of microprocessor based hardware and software; interfacing microprocessors to volatile and non-volatile memory devices and to parallel and serial input/output devices using digital logic devices; assembly language programs are used to verify operation of the hardware. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: CETH 3233, EETH 2831.

**CETH 4235. Microcomputer Systems. (4).** Design and construction of complete microcomputer system including microprocessor, RAM, EPROM, input-output devices, and assembly language operating system. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: CETH 4234. **[I]**

**CETH 4241-6241. Internet Technology. (4).** Internet servers and protocols; e-mail using Simple Mail Transfer Protocol (SMTP), World Wide Web (WWW), Transmission Control Protocol/Internet Protocol (TCP/IP), Telnet Protocol, Hypertext Transport Protocol (HTTP), Hypertext Markup Language (HTML), File Transfer Protocol (FTP), Uniform Resource Locator (URL). *Three lecture hours, three laboratory hours per week.* PREREQUISITE: CETH 2251.

**CETH 4242-6242. Client Application Technology. (4).** Hypertext Markup Language (HTML), XML, and script languages. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: CETH 2251, or permission of instructor.

**CETH 4262-6262. Modern Programming. (4).** Application of Java programming languages to problems from selected area of engineering technology; data collecting, modeling techniques, constraints, program development and validation, and interfacing with peripherals. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: CETH 2261 and 3233.

**CETH 4263-6263. Server Application Technology. (4).** Java exception handling, multithreading, files and streams, JDBC, Servlets, JSP, JavaBeans, Perl server side software. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: CETH 4241, 4262, or permission of instructor.

**CETH 4272-6272. Operating Systems. (4).** Memory management, processor management, devise management, and file management; MS-DOS operating system, Windows NT, UNIX operating system, VAX/VMS operating system. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: CETH 2261 and 3233.

**CETH 4281-6281. Computer Network Technology. (4).** Local-area networks; interconnecting computers and peripherals; installation of network hardware and software; data communications between computers; sharing peripherals. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: CETH 3233, EETH 2831.

**CETH 4990-98. Special Topics. (1-3).** Topics are varied and in online class listings. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.

**CETH 4944. Senior Thesis. (3). (Same as EETH 4944, METH 4944).** Study and research in specific area culminating in an integrating experience through individual and/or group projects and technical reports. COREQUISITE: CETH 4235. (A-F, IP). **[W, I]**

## (CHEM) CHEMISTRY

PETER K. BRIDSON, Ph.D., *Chair*
*Room 210, J.M. Smith Building*
*http://www.chemistrychem.memphis.edu/*

***Additional fees are charged for some Chemistry lecture and laboratory courses.* See the online class listings or the Expenses section of the Bulletin.**

**CHEM 1010. Introduction to Chemistry I: General and Inorganic Chemistry. (3). (1101).** Fundamental laws of chemistry and impact of chemistry on modern society. NOTE: not credited toward major in any of the physical sciences, biological sciences, mathematics, or engineering. *Three lecture hours per week.* PREREQUISITE: two years of high school algebra. **[G]** ♦

**CHEM 1011. Introduction to Chemistry I Laboratory. (1).** Experiments, experimental techniques in general inorganic chemistry. *Two laboratory hours per week.* PREREQUISITE or COREQUISITE: CHEM 1010. **[G]** ♦

**CHEM 1020. Introduction to Chemistry II: Organic and Biochemistry. (3). (1102).** Emphasis on elementary organic and biochemistry. NOTE: not credited toward major in any of the physical sciences, biological sciences, mathematics, or engineering. *Three lecture hours per week.* PREREQUISITE: CHEM 1010. **[G]** ♦

**CHEM 1021. Introduction to Chemistry II Laboratory. (1).** Experiments, experimental techniques in organic and biochemistry. *Two laboratory hours per week.* PREREQUISITE or COREQUISITE: CHEM 1020. **[G]** ♦

**CHEM 1100. Preparation for General Chemistry. (3).** For students whose curriculum requires CHEM 1110 but who have inadequate background; emphasis on scientific calculations and properties of matter. NOTE: does not satisfy any part of science requirement for any degree; not applicable toward fulfilling credit hour minimum for degrees in The College of Arts and Sciences. *Three lecture hours per week.* COREQUISITE: MATH 1710 or 1720 recommended.

**CHEM 1110. General Chemistry I. (3). (1131, 1111).** For students who are majoring in one of the physical sciences, biological sciences, mathematics or engineering, or who are following a pre-professional program requiring additional chemistry. *Three lecture hours per week.* PREREQUISITE: high school chemistry or CHEM 1100, or CHEM 1010, and ACT Math score of 21 or MATH 1710. COREQUISITE: MATH 1730 or MATH 1910; CHEM 1111 recommended. **[G]** ♦

**CHEM 1111. General Chemistry I Laboratory. (1). (1121, 1111 lab).** Experiments and experimental techniques in general chemistry. *Three laboratory hours per week.* PREREQUISITE or COREQUISITE: CHEM 1110. **[G]** ♦

**CHEM 1120. General Chemistry II. (3). (1132).** Continuation of CHEM 1110. *Three lecture hours per week.* PREREQUISITE: CHEM 1110. COREQUISITE: CHEM 1121 recommended. **[G]** ♦

**CHEM 1121. General Chemistry II Laboratory. (1). (1122).** Continuation of CHEM 1111. *Three laboratory hours per week.* PREREQUISITE or COREQUISITE: CHEM 1120. **[G]** ♦

**CHEM 3201. Quantitative Chemical Analysis Laboratory. (2).** Application of the techniques of quantitative analysis in areas described in CHEM 3211. *Six laboratory hours per week.* PREREQUISITE or COREQUISITE: CHEM 3211. Note: Both CHEM 3201 and CHEM 3211 must be completed in order to satisfy the computation intensive requirement. **[C]**

**CHEM 3211. Quantitative Chemical Analysis. (2).** Theory and practice of modern chemical analysis; acid-base, redox, and complex ion equilibria, separation methods, absorptiometry, flame spectroscopy, and electroanalytical methods. *Two lecture hours per week.* PREREQUISITE: CHEM 1122, 1132. COREQUISITE: CHEM 3201 recommended. Note: Both CHEM 3201 and CHEM 3211 must be completed in order to satisfy the computation intensive requirement. **[C]**

**CHEM 3301. General Organic Chemistry I Laboratory. (1).** Emphasis on laboratory techniques as applied to synthesis and other reactions.

*Three laboratory hours per week.* PREREQUISITE: CHEM 1111, 1120. PREREQUISITE or COREQUISITE: CHEM 3311.

**CHEM 3302. General Organic Chemistry II Laboratory. (1).** Continuation of CHEM 3301; emphasis on correlation of chemical behavior with structure. *Three laboratory hours per week.* PREREQUISITE: CHEM 3311 and 3301 COREQUISITE or PREREQUISITE: CHEM 3312.

**CHEM 3311. General Organic Chemistry** I. **(3).** Systematic study of preparations and properties of organic compounds, including interpretations based on modern theories of organic chemistry; emphasis on aliphatic and aromatic hydrocarbons, their halogen derivatives, and alcohols. *Three lecture hours per week.* PREREQUISITE: CHEM 1120.

**CHEM 3312. General Organic Chemistry II. (3).** Continuation of CHEM 3311; emphasis on more important functional derivatives of aliphatic and aromatic hydrocarbons and natural products important in biochemistry. *Three lecture hours per week.* PREREQUISITE: CHEM 3311.

**CHEM 3401. Elementary Physical Chemistry. (3).** Abbreviated course in physical chemistry; elementary thermodynamics, phase transitions, solution chemistry, electrochemistry, kinetics, colloidal and surface chemistry, molecular polarity; credit may be obtained either in this course or in 3411, but not both. *Three lecture hours per week.* PREREQUISITE: CHEM 3211 or 3311, PHYS 2020/2021 or 2120/2121.

**CHEM 3402. Physical Chemistry Laboratory. (2).** Measurements of physical properties, reaction rates, and equilibria; application of electrochemistry and calorimetry. *Six laboratory hours per week.* PREREQUISITE: CHEM 3411. COREQUISITE or PREREQUISITE: CHEM 3412.

**CHEM 3411. Physical Chemistry I. (3).** Thermochemical foundations of physical chemistry applied to open and closed systems, kinetic theory of gases, and surface chemistry. *Three lecture hours per week.* PREREQUISITE: PHYS 2020/2021 or 2120/2121; MATH 1920.

**CHEM 3412. Physical Chemistry** II. **(3).** Continuation of CHEM 3411 emphasizing reaction kinetics, quantum chemistry, chemical bonding, statistical mechanics, spectroscopy, and other methods of structure determination. *Three lecture hours per week.* PREREQUISITE: CHEM 3411.

**CHEM 4001-6001. Environmental Chemistry. (3).** Chemical phenomena occurring in soil, atmospheric and aquatic environments; consideration of natural resources and energy. *Three lecture hours per week.* PREREQUISITE: CHEM 3311.

**CHEM 4101-6101. Inorganic Chemistry Laboratory. (1).** Experimental techniques of inorganic synthesis and physical methods for characterization of inorganic and organometallic compounds. *Three laboratory hours per week.* PREREQUISITE or COREQUISITE: CHEM 4111.

**CHEM 4111-6111. Inorganic Chemistry. (3).** Theoretical and applied inorganic chemistry; relationship of structure and bonding to properties of elements and compounds; introductory molecular orbital theory, coordination compounds and organometallics, ligand field theory, nonaqueous solvent systems, and reaction mechanisms. *Three lecture hours per week.* PREREQUISITE: CHEM 3412, or permission of the instructor. COREQUISITE: CHEM 4101 recommended.

**CHEM 4180-99-6180-99. Special Topics In Inorganic Chemistry. (1-3).** Topics are varied and in online class listings. PREREQUISITE: CHEM 3312 and permission of instructor.

**CHEM 4211-6211. Advanced Instrumental Analysis. (3).**Topics in analytical instrumental analysis, atomic spectroscopy, x-ray spectroscopy, mass spectroscopy, UV-visible spectroscopy, luminescence, infrared, Raman, and nuclear magnetic resonance spectroscopy. *Three lecture hours per week.* PREREQUISITE: CHEM 3211 and 3412.

**CHEM 4280-99-6260-99. Special Topics In Analytical Chemistry. (1-3).** Topics are varied and in online class listings. PREREQUISITE: CHEM 3412 and permission of instructor.

**CHEM 4311-6311. Intermediate Organic Chemistry. (3).** Further study of physical organic chemistry, spectrometric methods of identification of organic compounds, modern organic synthesis, and natural products chemistry. *Three lecture hours per week.* PREREQUISITE: CHEM 3312.

**CHEM 4315-6315. Organic Medicinal Chemistry. (3).** Introduction to principles of medicinal chemistry; structure, synthesis, and biochemical mechanism of action of major drug classes. *Three lecture hours per week.* PREREQUISITE: CHEM 3312.

**CHEM 4380-99-6380-99. Special Topics In Organic Chemistry. (1-3).** Topics are varied and in online class listings. PREREQUISITE: CHEM 3312 and permission of instructor.

**CHEM 4411-6411. Advanced Physical Chemistry. (3).** Advanced topics in physical chemistry; statistical mechanics and statistical thermodynamics plus selected topics in the areas of kinetic theory of gases, condensed phases, and nonequilibrium processes. PREREQUISITE: CHEM 3412, or permission of instructor.

**CHEM 4415-6415. Computational Chemistry. (3).** Application of computers to address problems in organic and inorganic chemistry; emphasis on use of quantum chemistry codes to solve problems related to electronic, molecular, and vibrational structure problems. PREREQUISITE: CHEM 3412 and permission of instructor.

**CHEM 4480-99-6480-99. Special Topics in Physical Chemistry. (1-3).** Topics are varied and in online class listings. PREREQUISITE: CHEM 3412 and permission of instructor.

**CHEM 4501-6501. Biochemistry Laboratory** I. **(2). (Same as MMCS 4503).** Survey of common biochemical techniques and the properties of biological molecules; emphasis on purification and assay of enzymes and on enzyme kinetics. *Six laboratory hours per week.* PREREQUISITE: CHEM 3302, or CHEM 3201 and 3301. PREREQUISITE or COREQUISITE: MMCS 4511 or CHEM 4511.

**CHEM 4502-6502. Biochemistry Laboratory II. (2). (Same as MMCS 4504).** Biochemical laboratory techniques, emphasis on nucleic acids and recombinant DNA techniques. *Six laboratory hours per week.* PREREQUISITE: MMCS 4511 or CHEM 4511, MMCS 4325 or 4470, or permission of instructor.

**CHEM 4511-6511. Biochemistry I. (3). (Same as MMCS 4511).** Chemistry of amino acids and proteins related to their properties in biochemical systems; enzymology, including kinetics and conformation studies; coenzymes and their functions; importance of pH; bioenergetics; chemistry of carbohydrates, lipids, and nucleotides. *Three lecture hours per week.* PREREQUISITE: CHEM 3312.

**CHEM 4512-6512. Biochemistry II. (3). (Same as MMCS 4512).** Continuation of CHEM 4511; metabolism of carbohydrates, amino acids and nucleotides; biochemistry of DNA and RNA, including their relationship to biosynthesis of proteins; DNA and RNA. *Three lecture hours per week.* PREREQUISITE: MMCS 4511 or CHEM 4511.

**CHEM 4580-99-6560-99. Special Topics in Biochemistry. (1-3). (Same as MMCS 4580-99).** Topics are varied and in online class listings. PREREQUISITE: CHEM 4512 and permission of instructor.

**CHEM 4604-6604. Instrumental Methods. (3).** Analytical instrumental techniques including molecular spectroscopy, chromatography, atomic spectroscopy, and electrochemical analysis. *One lecture hour, six laboratory hours per week.* PREREQUISITE: CHEM 3201, 3211, 3312, or permission of instructor. **[I]**

**CHEM 4901. Chemical Research I. (1).** Introduction to basic research; collaboration with faculty sponsor on problem of mutual interest in any chemical subdiscipline; effective literature search, laboratory techniques, experimental design, preparation and revision of formal scientific paper. *One seminar hour per week.* PREREQUISITE: CHEM 3312, permission of instructor, and complete prospectus in consultation with faculty sponsor.

**CHEM 4902. Chemical Research II. (1).** Continuation of basic research; collaboration with faculty sponsor on problem of mutual interest in any chemical subdiscipline; effective literature search, laboratory techniques, experimental design, preparation and revision of formal scientific paper. *One seminar hour per week.* PREREQUISITE or COREQUISITE: CHEM 4901.

**CHEM 4903. Chemical Research III. (1).** Completion of research project; collaboration with faculty sponsor on problem of mutual interest in any chemical subdiscipline; effective literature search, laboratory techniques, experimental design, preparation and revision of formal scientific paper. *One seminar hour per week.* PREREQUISITE or COREQUISITE: CHEM 4902.

## (CHIN) CHINESE

### Department of Foreign Languages and Literatures

RALPH ALBANESE, Ph.D., *Chair*
*Room 375, Dunn Hall*
*http://fl.memphis.edu*

**CHIN 1010. Elementary Chinese I. (3). (1101).** Principles of pronunciation; everyday expressions; basic sentence patterns through oral practice, writing and reading. ♦

**CHIN 1020. Elementary Chinese II. (3). (1102).** Continued study of sentence patterns through oral and written practice. PREREQUISITE: CHIN 1010 or equivalent. ♦

**CHIN 2010. Intermediate Chinese I. (3). (2201).** Continued study of sentence patterns through oral and written practice. PREREQUISITE: CHIN 1020 or equivalent. ♦

**CHIN 2020. Intermediate Chinese II. (3). (2202).** Continued study of sentence patterns through oral and written practice. PREREQUISITE: CHIN 2010 or equivalent. ♦

**CHIN 3301. Conversation and Composition. (3).** Conversational practice dealing with various topics on social life, traveling, business; fundamental Chinese grammar for reading and writing. PREREQUISITE: CHIN 2020 or equivalent.

**CHIN 3302. Conversation and Composition. (3).** Conversational practice dealing with various topics on Chinese culture, life style, business, education, history, current grammar and slang for conversation and composition. PREREQUISITE: CHIN 3301 or equivalent.

**CHIN 4301. Modern Chinese Fiction. (3).** Reading in twentieth-century Chinese fiction; themes of modernity, nationalism, class, gender and self. PREREQUISITE: CHIN 3301, 3302, or permission of instructor.

**CHIN 4304. Advanced Chinese I. (3).** Composition, reading, conversation; emphasis on vocabulary and grammar. PREREQUISITE: CHIN 3302, or equivalent.

**CHIN 4305. Advanced Chinese II. (3).** Composition, reading, conversation; emphasis on vocabulary and grammar. PREREQUISITE: CHIN 4304 or equivalent.

**CHIN 4780. Individual Studies in Chinese. (1-3).** Directed individual study in selected areas of Chinese chosen in consultation with instructor. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of the instructor. (A-F, IP)

**CHIN 4791-99. Special Topics in Chinese Literature, Language, or Civilization. (3).** May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.

## (CIVL) CIVIL ENGINEERING

MARTIN E. LIPINSKI, Ph.D., P.E., *Chair*
*Room 104A, Engineering Science Building*
*http://www.ce.memphis.edu/*

A minimum grade of "C" (2.0) must be earned in all CIVL courses that are prerequisites for other CIVL courses before taking those courses.

Undergraduate and graduate level engineering courses require an additional $20 per credit hour.

**CIVL 1101. Civil Engineering Measurements. (3).** Theory of measurements, linear measurements, angles, topographic surveys, and mapping with applications in Civil Engineering; emphasis on individual and group problem solving, techniques of data collection and analysis, and project documentation. *Two lecture hours, three laboratory hours per week.*

**CIVL 1112. Civil Engineering Analysis. (3).** Microcomputer applications for data analysis, presentation, documentation; emphasis on algorithm design and logic; fundamental numerical analysis; elementary programming. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: CIVL 1101. PREREQUISITE or COREQUISITE: MATH 1910.

**CIVL 2107. Civil Engineering Computation. (3).** Logical analysis of problems; development and implementation of computer programs in support of civil engineering analysis and design. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: CIVL 1112; PREREQUISITE or COREQUISITE: MATH 1920.

**CIVL 2131. Statics. (3).** Analysis of two and three dimensional force systems; centroids and moments of inertia; friction. *Three lecture hours per week.* PREREQUISITE: MATH 1920, PHYS 2110, 2111.

**CIVL 3103. Approximation and Uncertainty in Engineering. (3).** Application of fundamental numerical methods to obtain approximate solutions to engineering problems; application of fundamental probabilistic methods to quantify uncertainty in engineering data. *Three lecture hours per week.* PREREQUISITE: CIVL 2107. PREREQUISITE or COREQUISITE: MATH 3120.

**CIVL 3121. Structural Analysis I. (3).** Analysis of statically determinate structures; reactions, shear, and moment; truss analysis; deflections; influence lines and moving loads. *Three lecture hours per week.* PREREQUISITE: CIVL 2107, 2131. PREREQUISITE or COREQUISITE: CIVL 3322. [C]

**CIVL 3131. Design of Steel Structures. (3).** Current design concepts for structural steel members and their connections. *Three lecture hours per week.* PREREQUISITE: CIVL 3121, 3322.

**CIVL 3137. Civil Engineering Materials. (3).** Properties of aggregates, mix design and use of Portland cement concrete, masonry products and construction, use of wood and timber products in construction, bituminous materials and mixtures and other engineering materials. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: CIVL 3322, 3325.

**CIVL 3140. Environmental Systems Engineering. (4).** Fundamentals of environmental engineering systems with emphasis on the integration of the concepts of chemistry, hydraulics, economics, English, and social sciences as they can be applied to benefit mankind. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: CIVL 3180.

**CIVL 3161. Transportation Systems Engineering. (3).** Development and function of transportation systems; operational control and characteristics; system coordination, traffic flow and patterns. *Three lecture hours per week.* PREREQUISITE: CIVL 2107, MECH 2332, MATH 2110. COREQUISITE: CIVL 3103.

**CIVL 3180. Civil Engineering Hydraulics. (3).** Basic principles of incompressible fluid mechanics with emphasis on hydrostatics, conservation of energy and momentum with application on engineering analysis of pipe networks, pumps, and open channel systems. *Three lecture hours per week.* PREREQUISITE: CIVL 2107; MECH 2332.

**CIVL 3181. Hydrology and Hydraulics. (3).** Quantification of precipitation and runoff, reservoir and channel routing, groundwater, and design of drainage systems and open channels. *Three lecture hours per week.* PREREQUISITE: CIVL 3180.

**CIVL 3182. Hydrology and Hydraulics Laboratory. (1).** Principles of fluid mechanics, open channel hydraulics, and collection of hydrologic data; fluid instrumentation, measurement techniques, data collection methods, and organization of written reports of experimental investigations. *Two laboratory hours per week.* PREREQUISITE: CIVL 3180.

**CIVL 3322. Mechanics of Materials. (3). (Same as MECH 3322).** Analysis of components subjected to tension, compression, bending moment, torque; combined loading; Mohr's stress circle; deflection of beams; simple treatment of column buckling. *Three lecture hours per week.* PREREQUISITE: CIVL 2131.

**CIVL 3325. Mechanics of Materials Laboratory. (1).** Materials testing and evaluation. *Three laboratory hours per week.* COREQUISITE or PREREQUISITE: CIVL 3322.

**CIVL 4111. Engineering Economics. (3).** Application of economics and decision theory to engineering alternatives in planning, developing, constructing, and managing engineering projects. *Three lecture hours per week.*

**CIVL 4122-6122. Structural Analysis II. (3).** Analytical and numerical solutions for statically indeterminate structures. *Three lecture hours per week.* PREREQUISITE: CIVL 3121, 3322.

**CIVL 4131-6131. Intermediate Steel Design. (3).** Design of plate girders and composite beams; moment connections; current code provisions. *Three lecture hours per week.* PREREQUISITE: CIVL 3131.

**CIVL 4135. Reinforced Concrete Design. (3).** Strength analysis and design of reinforced concrete members; floor systems; current code provisions. *Three lecture hours per week.* PREREQUISITE: CIVL 3121, 3322.

**CIVL 4136-6136. Intermediate Reinforced Concrete Design. (3).** Design of two-way slab systems; column design including length effects; current code provisions. *Three lecture hours per week.* PREREQUISITE: CIVL 4135, PREREQUISITE or COREQUISITE: CIVL 4122.

**CIVL 4140-6140. Environmental Engineering Design. (3).** Detailed design of one component of an environmental engineering system with appropriate consideration of the interactions with the other components; design standards, procedures, and legal constraints. *Three lecture hours per week.* PREREQUISITE: CIVL 3140.

**CIVL 4143-6143. Physical/Chemical Treatment. (3).** Basic physical-chemical treatment concepts including sedimentation, filtration, adsorption, neutralization, coagulation, air stripping, dissolved air flotation, disinfection, and ion exchange; application of basic concepts to design of water and wastewater treatment system components. *Three lecture hours per week.* PREREQUISITE: CIVL 3140.

**CIVL 4144-6144. Biological Wastewater Treatment. (3).** Basic biological treatment concepts including biological kinetics, activated sludge, fixed-film systems, lagoon systems, and sludge digestion; application of basic concepts to design of biological wastewater treatment system components. *Three lecture hours per week.* PREREQUISITE: CIVL 3140.

**CIVL 4149-6149. Pump Station Design. (3).** Detailed design of sumps, pumps, piping, valves, and controls associated with the design of pumping systems for wastewater, process water, drinking water and storm water. PREREQUISITE: CIVL 3180; COREQUISITE: CIVL 3182.

**CIVL 4151. Soil Mechanics. (4).** Properties of soil and rock, including identification and classification, hydraulic properties, consolidation characteristics, and stress deformation-strength relationships. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: CIVL 2107, 3137.

**CIVL 4152. Applied Soil Mechanics. (3).** Subsurface exploration, foundation types, foundation construction, selection of foundation type and basis of design, earth retaining structures, and slope stability. *Three lecture hours per week.* PREREQUISITE: CIVL 4151.

**CIVL 4162-6162. Traffic Engineering. (3).** Traits and behavior patterns of road users and their vehicles; traffic signs and signals, pavement markings, hazard delineation, capacity, accidents and parking analysis. PREREQUISITE: CIVL 3103, 3161.

**CIVL 4163-6163. Airport Planning and Design. (3).** Aeronautical demand and air traffic control; airport and runway configuration; capacity and delay analysis, geometric design of runways and taxiways; airport access and parking; ground movements and baggage movements. *Three lecture hours per week.* PREREQUISITE: CIVL 3103, 3161.

**CIVL 4164-6164. Route Location and Design. (3).** Elements of route location and design; emphasis on horizontal and vertical alignment, curvature, gradient and sight distance. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: CIVL 1101, 3161.

**CIVL 4171. Construction Engineering I. (3).** Construction process and project management system; planning, cost estimating, bidding and scheduling construction projects; use of optimization techniques to control schedules and costs; computer applications. *Three lecture hours per week.* PREREQUISITE or COREQUISITE: CIVL 4111.

**CIVL 4172. Construction Engineering II. (3).** Application of construction engineering and management methods to estimate, bid, plan, and manage actual engineering construction project in safe, efficient manner. *Three lecture hours per week.* PREREQUISITE: CIVL 4171.

**CIVL 4180-6180. Advanced Hydrology and Hydraulics. (3).** Current methods and techniques used in hydrologic and hydraulic analysis for the design of water resources projects; watershed hydrology, groundwater hydrology, flood frequency analysis, flood plain management, hydraulic structures, hydraulic machinery, and project feasibility. *Three lecture hours per week.* PREREQUISITE: CIVL 3181.

**CIVL 4190-6190. Water Resources Planning and Design. (3).** Application of engineering principles to planning and design of multipurpose water resources projects, various physical components and appurtenances of water resources projects and economic, financial, and social feasibility of various purposes. *Three lecture hours per week.* PREREQUISITE: CIVL 3181, 4111 or permission of instructor.

**CIVL 4191. Civil Engineering Projects. (1-3).** Independent investigation of a Civil Engineering problem in consultation with instructor. May be taken for a maximum of 3 hours credit toward graduation. PREREQUISITE: permission of instructor.

**CIVL 4193. Senior Seminar. (1).** Reports and discussion on engineering history, current developments, ethics, professionalism, registration, engineering organizations, publications, and activities. *One lecture hour per week.* PREREQUISITE: senior standing in civil engineering. (S/U).

**CIVL 4199. Civil Engineering Design. (3).** Design of a civil engineering system. Establishment of design objectives and criteria; synthesis and computer assisted analysis of alternatives; selection of optimum system design; preparation of detailed system descriptions including design sketches and engineering drawings and reports. Must be taken in student's final semester. *Two lecture hours, two laboratory hours per week.* PREREQUISITE: ENGL 3603. **[W, I]**

**CIVL 4900-10-6900-10. Special Topics in Civil Engineering. (1-3).** Topics are varied and in online class listings.

**CIVL 4999. Honors Thesis. (3).** Under the direction of a faculty member, the student writes and defends a thesis based upon background reading and research on a topic in civil engineering. PREREQUISITE: Approval by the Honors Committee of the Department of Civil Engineering.

## (CJUS) CRIMINOLOGY AND CRIMINAL JUSTICE

RICHARD JANIKOWSKI, J.D., *Chair*

*Room 309, McCord Hall*

*http://cjustice.memphis.edu*

CJUS 3129 is a prerequisite for all upper division courses except CJUS 3510 and 3521. CJUS 3130 is a prerequisite or corequisite for CJUS 3540. CJUS 1100, 3129, 3130, 3510, 3521, and 3540 are prerequisites for all upper division electives. The department chair or advisor may grant exceptions to these requirements for selected elective courses.

**CJUS 1100. Introduction to Criminal Justice. (3).** Introduction to American criminal justice system in its three dimensions: police, courts, and corrections, tracing its development from ancient and early English beginnings to present time. **[G]**

**CJUS 2110. Comparative Justice Systems. (3).** Overview of justice systems of various countries, focusing primarily on substantive and philosophical relationships between the subsystems and the society they serve. **[G]**

**CJUS 2120. Contemporary Issues in Criminal Justice. (3).** Overview of current problems facing the criminal justice system; magnitude, causation, potential consequences, potential solutions.

**CJUS 3129. Statistical Methods in Criminal Justice. (4).** Statistical methods commonly utilized in criminal justice research; emphasis on descriptive and inferential statistics, measures of significance, and interpretation of results; introduction to micro-computers. *Three lec-*

*ture hours, two laboratory hours per week.* PREREQUISITE: COMP 1200 or equivalent, and MATH 1710, 1830 or 1910. **[C]**

**CJUS 3130. Research Methods in Criminal Justice. (3).** Techniques commonly utilized in criminal justice research, emphasis on research design, methods of data collection, measurement of variables, and threats to validity and reliability; use of microcomputers and statistical programs for data collection and analysis. PREREQUISITE: CJUS 3129.

**CJUS 3152. Drug Addiction and Alcoholism. (3).** Cultural and medical aspects of use of alcohol and various other drugs; consideration of roles of law enforcement and corrections in these areas.

**CJUS 3226. Police in America. (3).** Comparative analysis of problems, procedures, organization, and functions of effective police organization.

**CJUS 3326. Courts in America. (3).** Exploration and analysis of structure, process, personnel, policy, and legal theory in the American judicial system.

**CJUS 3426. Corrections in America. (3).** Concepts of organizational behavior applied to probation, parole, community-based corrections, prisons, and other detention facilities, with emphasis on their history and practice.

**CJUS 3510. Law and Society. (3).** Law as system of control and as mechanism for resolution of conflict; relationship of law to political, economic and social systems critically analyzed and development of legal profession studied.

**CJUS 3521. Constitutional Criminal Procedure. (3).** General application of U.S. constitution principles to investigative and prosecutorial process of the criminal justice system; emphasis on requirements of the 4th, 5th, 6th, 8th, and 14th Amendments as they relate to arrest, search, and seizure, interrogation and identification procedures, trial and appellate proceedings.

**CJUS 3540. Criminology. (3). (3541).** Examination and explanation of crime; sociological, economic, psychological and biological theories of crime causation; theories examined in light of criminal justice data.

**CJUS 3542. Crime and Criminal Typologies. (3).** Classification of crime and Typical elements involved in each type of crime, classification of criminal offenders and salient career variables associated with each type of offender relative to background, crime, and career prognosis.

**CJUS 4010-19-6010-19. Special Topics in Criminal Justice. (1-3).** Topics are varied and in online class listings.

**CJUS 4100. Individual Directed Study in Criminal Justice. (1-6).** Individual directed reading and research in special areas of interest in field of criminal justice. PREREQUISITE: permission of department chair. May be repeated for a maximum of 6 hours credit.

**CJUS 4110. Senior Seminar in Criminal Justice. (3).** Analysis of criminal justice issues from a systems perspective; emphasis on active learning, gaining familiarity with criminal justice resources, and development of analytical and writing skills. PREREQUISITE: senior standing in Criminology and Criminal Justice or permission of department chair. **[W, I]**

**CJUS 4126. Criminal Justice Administration and Management. (3).** Management philosophies for administration of criminal justice agencies; focus on organizational behavior, theories of management, planning and budgeting, administrative legal issues, and administrative problems unique to the criminal justice system.

**CJUS 4130. Ethical Dilemmas in Criminal Justice. (3).** Legal, moral, and social implications of ethical dilemmas in criminal justice, including police use of deadly force, police discretion, victimless crimes, surveillance, enforcement of unpopular laws, use of informers, plea bargaining, judicial discretion, and capital punishment; subcultural norms and dilemmas they present to criminal justice practitioners.

**CJUS 4150. Internship in Criminal Justice. (1-3).** Experience in actual criminal justice setting; department and agency supervise and direct student program. May be repeated for maximum of 6 hours credit. PREREQUISITE: senior standing and/or approval of chair. (S/U).

**CJUS 4160-6160. Forensic Sciences. (3).** Forensic specialities in terms of their history, scientific rationale upon which each is based, and problems that may compromise accuracy or validity; introduction to field techniques and analysis of evidence.

**CJUS 4170. Prevention and Deterrence to Crime. (3).** Theoretical and practical strategies for crime prevention and deterrence; social, environmental, and mechanical developments; police, courts, and correctional elements of criminal justice system analyzed in terms of current effectiveness and future potential for crime suppression.

**CJUS 4180-6180. Corporate and White-Collar Crime. (3).** Organizational and occupational crime compared to other types of criminality; emphasis on causes, frequency, control, and social impact.

**CJUS 4190-6190. Terrorism: Social and Legal Perspective. (3).** Theoretical and ideological aspects of practice of and response to international and domestic terrorism; terrorism as crime from political, social. economic, historical, and legal perspectives.

**CJUS 4233. Organized Crime. (3).** Nature, structure, characteristics, and investigation of syndicated crime; its impact on social and economic conditions in this country.

**CJUS 4235. Private and Industrial Security. (3).** Role and function of private police organizations and legal restrictions on private security personnel; facets of private security to include retail, industrial and corporate security.

**CJUS 4520-6520. Substantive Criminal Law. (3).** Substance of the crime, including common-law sources and basic principles, types of offenses, responsibility, justification and excuse, and related areas.

**CJUS 4521. Foundations of the Criminal Process. (3).** Examination of historical, philosophical and social issues influencing the development of criminal law; consideration of various problems regarding application of criminal law in a democratic society.

**CJUS 4530. Principles of Evidence and Proof. (3).** Rules of evidence and matters of proof affecting criminal investigation in investigatory and prosecutive stages of criminal justice; socio-legal aspect of basic rules of evidence, including hearsay rules, impeachment, materiality and relevancy, privilege, eyewitness identification.

**CJUS 4531-6531. Issues in Constitutional Rights. (3).** Issues in constitutional rights related to criminal defendants; exclusionary rule; application of 1st Amendment to criminal law; due process, equal protection; examination of civil and criminal remedies for protecting and vindicating constitutional rights.

**CJUS 4533-6533. Juvenile Delinquency: Theory and Process. (3).** Theories of juvenile delinquency, gang activities, and status offenses; history, organization programs and procedures of agencies charged with control and prevention of juvenile delinquency including police, juvenile units, juvenile court, and juvenile correctional agencies.

**CJUS 4542. Victimology. (3).** Analysis of victim's role in criminal event; victim interaction with offender, criminal justice system, and others involved in event; evidenced by current and historical research findings. PREREQUISITE: senior standing or permission of instructor.

## (CLAS) CLASSICS

### Department of Foreign Languages and Literatures

RALPH ALBANESE, Ph.D., *Chair*
*Room 375, Dunn Hall*
*http://fl.memphis.edu*

**CLAS 2481. Mythology. (3).** Thematic study of classical myths and their function in ancient literature; emphasis on reading myths in ancient sources in translation. **[G]** ♦

**CLAS 3021. Scientific Terminology. (3).** Origin and derivation of words used in medicine and the sciences; emphasis on building of scientific vocabulary.

**CLAS 3412. Roman Culture. (3).** Study based on literary sources, of public and private life including such topics as family life, slavery, religion, medicine, law, and technology.

**CLAS 3413. Greek Literature in Translation. (3).** Reading and analysis of masterpieces of Greek literature in translation from Homer to Lucian; emphasis on development of literary types.

**CLAS 3414. Roman Literature in Translation. (3).** Reading and analysis of masterpieces of Roman literature in English translation from origins to close of Silver Age; emphasis on genres of Roman literature.

**CLAS 4780. Individual Studies in Classics. (1-3).** Directed individual study in selected areas of Classics chosen in consultation with instructor. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor. (A-F, IP)

**CLAS 4791. Special Studies in Classics. (1-3).** Topics in classical literature and civilization. May be repeated for maximum of 6 hours credit. PREREQUISITE: permission of instructor. (A-F, IP)

## (COMM) COMMUNICATION

ROBERT W. McDOWELL, Ed.D., *Interim Chair*
*Room 143, Theatre and Communication Building*

**NOTE: In addition to specific prerequisites, junior standing or permission of the department chair is a prerequisite for all 3000 and 4000 level courses in the Department of Communication.**

**COMM 1780. Introduction to Human Communication. (3).** Principles and processes underlying human communication; communication models, communication purposes and breakdowns, and variables related to interpersonal, small group, intercultural, and public communication.

**COMM 1823. TV/Video Production Laboratory. (1).** Experiences in the production of broadcast quality television studio and remote productions. Student will assume technical positions on a variety of assignments as production assistants. May be repeated for a maximum of 3 hours credit.

**COMM 1851. Introduction to Film. (3).** Comprehensive study of the forms, functions, and history of film art; emphasis on developing student's critical skills and aesthetic appreciation through analysis of complex formal, social, historical, and cultural dimensions of the art of film. **[G]** ♦

**COMM 2381. Oral Communication. (3).** Principles and practices of basic oral communication forms, with emphasis on listening and critical understanding related to contemporary mass media, especially television and film, and to public information and decision making. **[G]**

**COMM 3321. Argumentation and Debate. (3).** Theory of argumentation with emphasis on developing skills in analysis, reasoning, and use of evidence in various debate situations and understanding of the role of debate in public decision making. PREREQUISITE: COMM 2381.

**COMM 3322. Theories of Persuasion. (3).** Principles underlying communication designed to influence attitudes or behavior; approaches to motivation, perception, message structure, attention, reasoning, audience analysis, persuasibility, and attitude change; items for analysis are drawn from speeches, advertising, radio, television, and film.

**COMM 3330. Methods of Communication Analysis. (3).** Examination and application of qualitative and quantitative methods of research. PREREQUISITE: COMM 1780 or JOUR 1700. **[C]**

**COMM 3341. Discussion. (3).** Study and practice of principles and techniques of discussion, dealing with current problems of wide interest and significance. (A-F, IP)

**COMM 3342. Communication and Leadership. (3).** Relationship between communication variables and leadership styles and effectiveness in various organizational and group settings.

**COMM 3361. African-American Rhetoric. (3).** Speeches and rhetoric of African-Americans; emphasis on spokespersons, such as Walker, Turner, Douglass, Washington, DuBois, Malcolm X, King, Davis, and Jackson.

**COMM 3371. Freedom and Responsibility of Speech. (3).** Development of freedom of speech as Western value and attendant problems of ethical practices, limitations, and responsibilities.

**COMM 3800. Elements of Broadcasting and Electronic Media. (3).** Survey of broadcast and electronic media dealing with technology, history, programming, economics, advertising, and regulation.

**COMM 3801. TV Production Techniques for Journalists. (4).** For majors in the broadcast journalism sequence; basic principles and techniques of video production with production exercises. PREREQUISITE: permission of instructor.

**COMM 3802. Production Techniques for Organizations. (3).** Location video and slide/tape equipment, operations, and techniques; emphasis on informational and public relations programming. Not open to Film and Video Production students.

**COMM 3820. Broadcast Preparation and Performance. (3).** Skills required for on-air performance in broadcasting and cable, emphasizing use of voice and copy preparation; presentation of public affairs programming, talk show hosting, sportscasting, newscasting, and general announcing.

**COMM 3821. Radio Production and Studio Operations. (3).** Preparation, production, and evaluation of programs, including talk, discussion, interview, music documentary, and special event shows; emphasis on construction, editing, and compilation for broadcast use.

**COMM 3823. Motion Picture Production I. (4).** Basic production skills and theory; still and 16mm motion picture photography, film editing and audio. Hands-on production exercises.

**COMM 3824. Motion Picture Production II. (4).** Continued production skills and theory utilizing 16mm film, digital video and digital post production. Extensive production exercises. PREREQUISITE: minimum grade of "C" in COMM 3823, or permission of instructor.

**COMM 3842. Television Studio Production I. (4).** Techniques of studio TV production, including staging and direction of programs. PREREQUISITE: minimum grade of "C" in COMM 3823, or permission of instructor

**COMM 3861. Television and Culture. (3).** Social, political, and aesthetic dimensions of television in contemporary culture. **[W]**

**COMM 4011-6011. Communication in Organizations. (3).** Study of communication systems and problems in contemporary organizations, with emphasis on the role of communication in corporate culture and organizational change.

**COMM 4012-6012. Health Communication. (3).** Examination of the role of communication in health care; application of communication theory and practice to the health care context, from provider-patient interaction to cultural influences on health.

**COMM 4013-6013. Communication in Political Campaigning. (3).** Forms and effects of communication between politicians and constituencies; emphasis on campaign rhetoric via mass media, debates, and model speeches.

**COMM 4014-6014. Computer-Mediated Communication. (3).** Theories of computer-mediated communication in interpersonal relationships and organizations; role and impact of the internet and computer technology in society.

**COMM 4210-19-6210-19. Special Topics In Communication Studies. (1-3).** Topics are varied and in online class listings. May be repeated for a maximum of 9 hours credit.

**COMM 4220-29-6220-29. Special Topics in Film. (1-3).** Topics are varied and in online class listings. May be repeated for a maximum of 9 hours credit.

**COMM 4340-6340. Listening. (3).** Exploration of communication theory and practice from perspective of listening; philosophical, practical, personal dimensions of listening as an art of being as well as a mode of doing.

**COMM 4341-6341. Interpersonal Communication. (3).** Theory, research and practice regarding dyadic.

**COMM 4342-6342. Small Group Communication. (3).** Study of group communication theory, emphasizing group membership, member perceptions, group development, group processes, and group outcomes.

**COMM 4360-6360. Great American Speeches. (3).** Examination of notable speeches from before founding of the republic through twentieth century; religious and secular foundations of American rhetoric; tensions of inclusion and exclusion in development of national self-understanding. [W]

**COMM 4373-6373. Interracial Communication. (3).** Special problems encountered in communication among races; readings, discussion, and field study of how prejudice, stereotypes, and self-concepts can affect communication; exploration of methods to minimize these problems.

**COMM 4374. Directed Studies in Communication. (1-3).** Independent research in areas of special interest of communication, broadcast and electronic media, and film. PREREQUISITE: permission of instructor. (A-F, IP)

**COMM 4375-6375. Intercultural Communication. (3).** Special problems encountered in communication among people of different cultural backgrounds; focus on understanding communication between and among people with different national/cultural backgrounds and functioning more effectively in multicultural settings. [W]

**COMM 4380-6380. Communication and Conflict. (3).** Theories and methods of conflict management and resolution, focusing on practical communication skills; concepts of perception, listening and peacemaking emphasized.

**COMM 4381. Rhetoric and Public Controversy. (3).** Intensive examination of the presentation of public issues in political and entertainment forms (speeches, drama, television, and film). PREREQUISITE: senior standing, or permission of instructor. [I]

**COMM 4802-6802. Internship. (1-3).** Field studies in communication. Supervised practical work with government institutions, non-profit organizations, private business, film companies, and broadcast and electronic media firm. Written analysis of experience required. May be repeated for maximum of 6 hours credit. PREREQUISITE: permission of instructor. (S/U).

**COMM 4810-6810. Broadcast Regulation and Program Policy. (3).** Effects of FCC and other governmental regulations on broadcast and electronic media management and operations; licensing, renewals, content control, politics, and copyright. PREREQUISITE: COMM 3800.

**COMM 4811-6811. Radio and Television Programming. (3).** Analysis of individual program formats (with examples); use of this information along with ratings and other audience research to study design of program schedules. PREREQUISITE: COMM 3800.

**COMM 4812-6812. Communications Law in the Performing Arts. (3).** Artist, performer, and management contractual relationships; acquisition, copyright, and disposition of literary and audio-visual properties; production and distribution agreements; advertising law and other matters for TV, motion picture, radio, and stage businesses.

**COMM 4822-6822. Audio Production for Film and Video. (3).** Intermediate principles and practices of audio (recording, editing, mixing, and design), with emphasis on film and video production. PREREQUISITE: minimum grade of "C" in COMM 3824, or permission of instructor.

**COMM 4824-6824. Cinematography/Videography. (3).** Art of visual interpretation with strong concentration in theory and techniques of lighting; experience with professional film and video cameras and lighting equipment. PREREQUISITE: minimum grade of "C" in COMM 3824, or permission of instructor.

**COMM 4825-6825. Editing and Post-Production. (3).** Aesthetics of continuity development in a variety of editing styles; editing techniques and post-production procedures for both videotape and double system film. PREREQUISITE: minimum grade of "C" in COMM 3824, or permission of instructor.

**COMM 4831-6831. Broadcast and Cable Sales and Advertising. (3).** Relation of broadcasting and cable sales and advertising to networks, station representatives and salespeople; role of sponsors, agencies, and allied groups. PREREQUISITE: COMM 3800.

**COMM 4841-6841. Television Workshop. (4).** Production of television programming for local cable casting. May be repeated for a maximum of 8 hours credit; repetition will not result in a change of any grade previously given. PREREQUISITE: COMM 3842, or permission of instructor.

**COMM 4842. Television Studio Production II. (4).** Advanced training in TV studio/multiple camera techniques; extensive production work. PREREQUISITE: COMM 3842.

**COMM 4850-6850. Film History I. (3).** Historical survey of motion pictures from medium's pre-history to 1940; emphasis on narrative film.

**COMM 4851-6851. Film History II. (3).** Historical survey of the major movements, genres, and themes in narrative film from 1940 to 1960.

**COMM 4853-6853. Documentary Form in Film. (3).** Development of non-fiction film as rhetorical and expressive form; analysis of individual films, genres, and filmmakers.

**COMM 4854. Documentary Form in Broadcasting. (3).** History, theory, and criticism of non-fiction broadcasting, including docudrama and television documentaries.

**COMM 4856-6856. Women and Film. (3).** Women as performers, viewers, subjects, and creators in U.S. and international cinema.

**COMM 4857-6857. History of Broadcast and Electronic Media. (3).** Comprehensive history of broadcast and electronic media in United States as developed from 1895 to present; use of primary sources. PREREQUISITE: COMM 3800.

**COMM 4858-6858. Contemporary Cinema. (3).** Major themes and styles in international and U.S. narrative film from 1960 to present. [W]

**COMM 4871-6871. Broadcast and Cable Management. (3).** Theories of management; special problems and situations confronting managers of broadcast and cable outlets; personnel, engineering, programming, news, promotion, and sales functions. PREREQUISITE: COMM 3800.

**COMM 4891-6891. Producing and Directing for Film and Video. (3).** Research and script preparation; budgeting and production management; working with actors and crew. PREREQUISITE: COMM 3824, or permission of instructor.

**COMM 4892. Film and Video Production. (1-3).** Film and video production workshop; class members write, produce, direct, and assume crew responsibilities on productions. May be repeated for a maximum of 6 hours credit. See departmental guidelines for independent production requirements and procedures. PREREQUISITE: COMM 3824 and permission of instructor. (A-F, IP)

**COMM 4960-6960. Documentary Writing. (3).** Writing for non-fiction media.

**COMM 4970-6970. Screenwriting. (3).** Writing for fiction film and television; basic dramatic theory, narrative structure, characterization, dialogue, adaptation, and the unique demands of audiovisual media.

**COMM 4980. Honors Studies. (3).** Reserved for students enrolled in Communication Honors Program. May be repeated for a maximum of 15 hours credit. PREREQUISITE: permission of Director of Communication Honors Program.

**COMM 4982. Honors Seminar. (3).** Intensive study of particular problems in communication. May be repeated for a maximum of 12 hours credit when topic varies. PREREQUISITE: permission of Director of Communication Honors Program. (A-F, IP)

**COMM 4993. Senior Practicum. (3).** Independent work in radio, video, or film production; each student has complete creative control of a program from conception through final product. See departmental guidelines for independent production requirements and procedures. PREREQUISITE: permission of instructor. [I] (A-F, IP)

**COMM 4999. Senior Honors Thesis. (3).** Supervised independent research project. Open only to students enrolled in the Communica-

tion Honors Program. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of Director of Communication Honors Program. (A-F, IP)

## (COMP) COMPUTER SCIENCE

### Department of Mathematical Sciences

JAMES E. JAMISON, Ph.D., *Chair*
*Room 373, Dunn Hall*
*http://www.cs.memphis.edu*

**COMP 1200. Computer Literacy. (4).** Basic computer concepts including hardware, operating systems, software, human-user interface; software packages including word processing, graphics, spreadsheets, database management; programming in HTML; basics of networks and Internet; legal, ethical, social implications of computers and their role in our world. *Three lecture hours, two laboratory hours per week.* NOTE: Credit may not be used for degree with major in computer science. PREREQUISITE: DSPM 0850, or two years of high school mathematics.

**COMP 1900. CS1: Introduction to Computer Science. (4).** Fundamental concepts of programming in object-oriented paradigm; primitive data types, control structures, arrays, strings, I/O, objects and classes; documentation, coding styles and debugging; problem-solving strategies, fundamental programming skills. NOTE: course is designed for computer science majors. Non-majors should take COMP 4001. *Three lecture hours, two laboratory hours per week.* PREREQUISITE: MATH 1730, or equivalent.

**COMP 2150. CS2: Data Structures. (3).** Principles of object-oriented programming and software engineering; problem solving with recursion and abstract data types, including linked lists, stacks, queues, trees, binary search trees, and graphs; basic sort and search algorithms; hashing. PREREQUISITE: MATH 1830 and either COMP 1900 or EECE 1207. COREQUISITE: MATH 2701.

**COMP 3160. CS3: Advanced Data and File Structures. (3).** Review of data structures and object-oriented concepts; implementation of advanced data structures in elementary algorithms; file structures, operations, types and other secondary storage organization; external sorting; indexing, B-trees and hashing. PREREQUISITE: COMP 2150, MATH 2701.

**COMP 3410. Computer Organization and Assembly Language. (3).** Basic concepts in assembly language programming, including logic, comparing and branching, interrupts, macros, procedures, arrays, program design, testing, debugging, loading, and linking; combinational, arithmetic and logical circuits in ALU; memory circuits, latches, flip-flops, registers; computer structure; fetch-execute cycles, clocks and timing; microprogramming and microarchitecture; data path, timing, sequencing; cache memory organization; RISC architectures. NOTE: Students may not receive credit for all three of the following: COMP 3230, 3420, 3410. PREREQUISITE: COMP 2150.

**COMP 4001-6001. Computer Programming. (3).** Basic concepts in computer programming in BASIC and FORTRAN, including the software development cycle, data types, interation and flow control commands, modular programming, i/o, file processing; basic skills for using operating systems (DOS, VMS), graphics, computer systems, and network navigation. NOTE: Computer Science majors may not use this course to fulfill degree requirements. PREREQUISITE: MATH 1710.

**COMP 4002-6002. Accelerated Computer Programming. (3).** Computers and computer programming; principles of style and documentation; specification, algorithms, coding, and step-wise refinement; structured language, modularity; recursive procedures; programming of basic data structures including linked lists, stacks, queues, trees, and sets; basic sort and search algorithms; hashing. NOTE: Computer Science majors may not use COMP 4002 to fulfill degree requirements. Credit for either COMP 1900 or COMP 2150 precludes credit for COMP 4002. PREREQUISITE: MATH 1910. COREQUISITE: MATH 4701 or 6701.

**COMP 4003-6003. Computer Organization and Assembly Language Programming. (3).** Binary signals, combinatorial and sequential logic networks, computer structure, memory, control, processing, and I/O units; instruction types and execution; computer machine language; symbolic coding and assembly systems; design, coding, testing, tracing, and debugging. NOTE: Computer Science majors may not use COMP 4003 to fulfill degree requirements. Credit for COMP 3410 precludes credit for COMP 4003. PREREQUISITE: COMP 4002.

**COMP 4005-6005. Web Design and Development. (3).** Web interface development using HTML, dynamic HTML, XML, JavaApplets, CGI Scripts (with Pearl, C, C++, etc.), Javascripts, Java Servlets, and dynamic forms; technological issues in web page design and data visualization; search engines and their features; digital libraries, Push Technology. NOTE: Computer Science majors may not use this course to fulfill degree requirements. PREREQUISITE: COMP 4001, one course in computer program, or permission of instructor.

**COMP 4011-6011. Advanced Visual Basic. (3).** Advanced internet and user interface features and applications; error handling; graphics, images, audio; multimedia; database applications. NOTE: Computer Science majors may not use this course to fulfill degree requirements. PREREQUISITE: COMP 4001, or permission of instructor.

**COMP 4014-6014. Introduction to Java Programming. (3).** Basic structured programming syntax; internet features; client/server environments, Applets/Servlets; advanced Java features, user interface, JFC Eidgets and Events, SWING; database applications; security, threading. NOTE: Computer Science majors may not use this course to fulfill degree requirements. PREREQUISITE: COMP 4001, or permission of instructor.

**COMP 4016-6016. JAVA Programming for Teachers. (3).** Object-oriented programming; problem solving; algorithm development and testing; primitive data types; instantiable classes; control structures, strings, arrays, packages, inheritance and polymorphism. NOTE: Computer Science majors may not use this course to fulfill degree requirements. PREREQUISITE: programming experience in higher-level language.

**COMP 4030-6030. Introduction to Algorithms. (3)** Asymptotic behavior of programs, basic paradigms in algorithm design; greedy, divide-and-conquer, dynamic programming; analysis of efficiency and optimality of representative algorithms, including graph, pattern matching, numerical, randomized, and approximation algorithms; approaches to lower bound analysis; basic parallel algorithms. PREREQUISITE: COMP 3160.

**COMP 4040-6040. Programming Languages. (3).** Comparative features, syntax, and applicability of high-level programming languages such as FORTRAN, COBOL, PASCAL, SNOBOL, LISP, ADA, C, and FORTH, data types, and data structures, control structures and dataflow, procedures, recursion, runtime environment, string manipulation, list processing, array processing, documentation programming style. PREREQUISITE: COMP 3160. **[W]**

**COMP 4041-6041. Introduction to Compilers. (3).** Finite state recognizers, lexical scanners, symbol tables context-free languages and pushdown automata context-free parsing methods such as recursive descent, LL(K), precedence, LR(K), SLR(K); language translation, generation and improvement of machine independent codes, inherited and synthesized attributes, syntax-directed translation schema. PREREQUISITE: COMP 3410, 4040, 4030.

**COMP 4081-6081. Software Development. (3).** Scope of software engineering, software life cycle models, software process; team organization; requirements analysis and design methodologies; metrics; inspections; testing strategies and maintenance. Students work in teams to implement software product using object-oriented analysis and design techniques. PREREQUISITE: COMP 3160.

**COMP 4115-6115. Database Processing and Design. (3).** Database processing and architecture; conceptual data modeling and data design; logical data models; relational models, operations and algebra; query languages and SQL; normalization and schema refinement; basic indexing techniques (hashing and B+trees). PREREQUISITE: COMP 3160, or permission of instructor.

**COMP 4242-6242. Introduction to Computer Graphics (3).** Characteristics of graphics I/O devices; 2D pictures, scaling, translation, rotation, and windowing; drawing histograms, simple maps, block diagrams, and flowcharts; curved lines, precision, quantization and interpolation, plotting equations; 3D pictures, scaling, translation, rotation, and projections hidden line problem, non-Euclidean geometry, animation. PREREQUISITE: COMP 3410.

**COMP 4262-6262. Programming UNIX. (3).** Fundamentals of the UNIX system and environment including: file system, shell concepts and programming, editors (vi and emacs), filters (sed, awk, grep, sort), utilities (make, yacc, lex), mail facility, communication software, C programming and its UNIX interface, X window system. PREREQUISITE: COMP 2150, or permission of instructor.

**COMP 4270-6270. Introduction to Operating Systems (3).** Hierarchy of storage devices, I/O buffering, interrupts, channels; multiprogramming, processor and job scheduling, memory management: paging, segmentation, and virtual memory; management of asynchronous processes; interrupt procedure calls, process stateword and automatic switch instructions, semaphores, concurrency; security and recovery procedures. PREREQUISITE: COMP 3160, and either COMP 3410 or EECE 4270. **[I]**

**COMP 4302-6302. Internet Applications and Java Programming. (3).** Structure of the internet and world-wide web; client-server environments; programming applications in Java and HTML; java applets and web's cgi scripts; security issues; other large networks. PREREQUISITE: COMP 2150.

**COMP 4310-6310. Introduction to Computer Networks. (3).** Network structure and architecture; network topology; ISO reference model; physical layer and datalink layer; communications lines; Fourier analysis and synthesis; modulation; transmission media; coding theory; data compression, cryptography, error detection and correction; case studies of LANs: CSMA/CD, token ring, token bus. PREREQUISITE: COMP 2150 and COMP 3410.

**COMP 4410-6410. Computer Security. (3).** Basic issues in computer security; confidentiality, integrity, availability, trust; basic methods and protocols in cryptography, digital signature, authentication, bit commitment; security of computer systems, programs, databases, operating systems; secure communication, secure channel, key infrastructure, certification; security policies, legal and ethical issues; risk management, security administration. PREREQUISITE: MATH 2701 and COMP 4270, or permission of instructor.

**COMP 4601-6601. Models of Computation. (3).** Computer models as a basis for the understanding and analysis of programming, computation and complexity; machine models (finite-state, stack and Turing machines); biologically-inspired models (neural nets; genetic algorithms); linguistic models (grammars, lambda calculus, predicate calculi); insolvability, universality, decidability, feasibility. PREREQUISITE: COMP 2150 and MATH 2701, or permission of instructor.

**COMP 4720-6720. Introduction to Artificial Intelligence (3). (Same as EECE 4720).** Fundamentals of programming in LISP; central ideas of artificial intelligence, including heuristic search, problem solving slot-and-filler structures; knowledge representation. PREREQUISITE: COMP 4040, or permission of instructor.

**COMP 4730-6730. Expert Systems. (3). (Same as EECE 4730).** Fundamentals of programming PROLOG, central ideas of expert system development, including knowledge representation, control structures, tools, knowledge acquisition, and knowledge engineering. PREREQUISITE: MATH 2701 and COMP 4030, or permission of instructor.

**COMP 4740-6740. Soft Computing. (3).** Foundations of intelligent and soft computing methods; approximate reasoning, fuzzy sets and rough sets, case studies, mathematical tools for soft computing, neurocomputing, evolutionary computing, other intelligent techniques; software implementation of soft computing and example applications. PREREQUISITE: COMP 3160, or permission of instructor.

**COMP 4901-6901. Individual Studies in Computer Science. (1-3).** Directed individual study of selected areas of computer science. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor. (A-F, IP)

**COMP 4911-6911. Internship in Computer Science. (1-6).** Practical experience in computer science. Students placed for some time with governmental or private organizations. Project must be approved and supervised by department faculty. Academic credit granted upon certification of the cooperating agency and acceptance by supervising faculty of student's written report. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of supervising faculty member. (S/U).

**COMP 4990-99-6990-99. Topics in Computer Science. (1-3).** Topics are varied and in online class listings. PREREQUISITE: permission of instructor.

## (COUN) COUNSELING AND PERSONNEL SERVICES

### Department of Counseling, Educational Psychology and Research

RONNIE PRIEST, Ph.D., *Chair*
*Room 100, E.C. Ball Hall*

*http://www.coe.memphis.edu/coe/CEPR/cepr.html*

**COUN 1661. Career Development. (3).** Relationship of interests, aptitudes and careers; exploration of work settings and activities to support individual career planning. Students expected to investigate work settings, relate this investigation to academic programs, and utilize this information in individual career development.

**COUN 4002. Independent Study in Counseling. (1-3).** Opportunity for self-directed study and/or research under the supervision of faculty member. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of faculty member. (S/U).

**COUN 4010-29. Special Topics in Counseling and Personnel Services. (3).** Topics are varied and in online class listings.

**COUN 4611-6611. Introduction to Counseling. (3).** Exploration of history, principles and administration of counseling services in community agencies, schools, business and industry; survey of applicable counseling services, skills and techniques.

**COUN 4621. Human Interactions. (3).** Human relations exercises and other personal experiences related to effective learning climates; communication skills for working in groups, one-to-one relationships, and identification and referral of persons to appropriate resources.

**COUN 4691. Residence Hall Staff Counseling and Advising. (3).** Practical experience for residence hall staff. Instruction and supervision provided. Individual and group activities in counseling, advising, communication, and leadership; concerns such as drug abuse, family planning information, and student discipline. Utilizes interdepartmental disciplines.

**COUN 4781-6781. Strategies for Crisis Intervention. (3).** Process of crisis intervention; study and practice in understanding crisis induced dysfunctional behavior, recognizing crisis situations and crisis counseling procedures.

**COUN 4783-6783. Alcohol and Drug Abuse Services. (3).** Survey of human services for treating alcoholics and substance abusers. Overview of treatment strategies and philosophies.

## (CSED) CONSUMER SCIENCE AND EDUCATION

DIXIE R. CRASE, Ph.D., *Chair*
*Room 404, Manning Hall*

*http://www.coe.memphis.edu/coe/csed/csed.html*

Due to possible changes in graduation requirements, it is the responsibility of the student to see his/her advisor for updates.

**CSED 1101. Personal Development and Human Relations. (3).** Individual and group adjustment and influences contributing to successful marriage and family life.

**CSED 1105. Clothing Selection and Construction. (3).** Standards in selecting and purchasing, construction of cotton garments to meet individual needs. *One lecture hour, four laboratory hours per week.*

**CSED 2004. Technical Skills for Home Furnishings. (3).** Students interested in housing, home furnishing, and related areas focus on varied program of technical skills involving 2-point perspective sketches and drafting freehand and with computer. For Family and Consumer Science majors who lack skills necessary to demonstrate concepts of depicting home furnishing interiors.

**CSED 2005. Introduction to Fashion Merchandising. (3).** Introduction to the types of enterprises, activities, operations, interrelationships, and practices in fashion industry; emphasis on merchandising terminology and techniques.

**CSED 2101. The Family in Global Perspective. (3). (Same as SOCI 2101).** Introduction to family as a primary, global, social institution; contributions sociology, anthropology, and Family and Consumer Science have made to understanding how and why family systems vary worldwide and common bonds and problems facing families in modern societies. [G]

**CSED 2104. Home Furnishings and Related Arts. (3).** Elements and principles of design applied to selection and arrangement of house and its furnishings.

**CSED 2106. Visual Merchandising. (3).** Theory and practice in visual merchandising (display); especially retail interior and window display techniques, display creation, planning promotions, and determining budgets.

**CSED 2202. Nutrition. (3).** Study of nutrients for the consumer; nutrition for preventive health throughout the life cycle.

**CSED 2302. Introduction to Foods. (3).** Scientific principles of food preparation; culinary techniques and menu planning emphasizing cultural ethnic foods; food safety, food sanitation; computerized nutrient analysis of foods. *Two lecture hours, three laboratory hours per week.*

**CSED 3002. Advanced Nutrition. (3). (4002).** In-depth study of nutrients and body utilization and discussion of current issues in nutrition. PREREQUISITE: CSED 2202, CHEM 1110/1111, 1120/1121.

**CSED 3100. Consumer Education. (2).** Examination of consumer problems in today's market place; emphasis on decision making, consumer rights and responsibilities and consumer information sources.

**CSED 3202. Nutrition for Health Care. (3).** Nutrition applications for health promotion and treatment of selected disease conditions. Required for admission to the Loewenberg School of Nursing at The University of Memphis. PREREQUISITE: BIOL 2010/2011, 2020/2021.

**CSED 3204. Residential Kitchen Planning. (3). (Same as ART 3204).** Design aspects of residential kitchens and their relationship to housing; basic kitchen planning principles based on NKBA guidelines, trends in socio-economic, multi-cultural, universal design; selection, use, care of appliances. PREREQUISITE: CSED 2104, or permission of instructor.

**CSED 3206. Merchandising Systems.(3).** Analysis of formulas used to plan and control the flow of merchandise through the use of both computer and manual systems. PREREQUISITE: Satisfactory completion of the General Education Program mathematics requirements. Accounting also recommended. [C]

**CSED 3302. Child and Adolescent Development. (3). (Same as EDPR 3302).** Principles and processes of child and adolescent development applied to education. Required clinical experiences outside of class. PREREQUISITE: EDPR 2111 (CSED 1101 for CSED major).

**CSED 3401. Parenthood Education. (3).** Parental role, parent-child relationship, and factors that influence parenthood.

**CSED 3502. Advanced Foods/Food Systems. (3).** Food systems management applications; procurement, production, and menu planning for groups; legislation and environmental issues; institutional equipment and design; human resource management; additional 16 hours of lab experiences in professional food service operations outside of classroom. PREREQUISITE: CSED 2302.

**CSED 4101-6101. Preschool Curriculum. (3).** Application of child development principles to program planning; infancy through four years of age.

**CSED 4102. Medical Nutrition Therapy. (3).** Nutrition assessment techniques; medical terminology and nutritional pharmacology; nutrition modalities for health promotion and selected conditions. PREREQUISITE: BIOL 2010/2011, BIOL 2020, 2021, CSED 2202, 3002, or permission of instructor.

**CSED 4106. Trends and Issues in the Profession. (3).** Senior capstone seminar that applies synergistic thinking to integrative discipline of home economics and specializations that make up the discipline; changing trends, issues, and technology affecting today's family and consumer sciences professional; professional orientation and leadership skills critiqued and enhanced in oral and written activities **[W, I]**

**CSED 4112. Medical Nutrition Therapy II. (3).** Nutrition care process and pathophysiology for selected conditions; alternative nutrition therapies. PREREQUISITE: CSED 4102

**CSED 4204-6204. Furnishings Problems and Presentations. (3).** Critical thinking and problem solving related to planning, coordinating, and purchasing of home furnishings. *Two lecture hours, one laboratory hour per week.* PREREQUISITE: CSED 2004, 4304.

**CSED 4205-6205. Behavioral Science Aspects of Clothing. (3).** Interdisciplinary study of clothing and appearance; concepts, methodologies, and applications of behavioral science to clothing.

**CSED 4211-4217. Readings. (1-3).** For Senior Consumer Science majors. In-depth reading or research in area of specialization. PREREQUISITE: Senior Consumer Science majors only.

**CSED 4211. Readings in Child Development and Family Relations. (1-3).** (A-F, IP)

**CSED 4212. Readings in Foods and Nutrition. (1-3).** (A-F, IP)

**CSED 4213. Readings in Family Economics and Consumer Education. (1-3).** (A-F, IP)

**CSED 4214. Readings in Housing and Home Furnishings. (1-3).** (A-F, IP)

**CSED 4215. Readings in Clothing and Textiles. (1-3).** (A-F, IP)

**CSED 4216. Readings in Fashion Merchandising. (1-3).** (A-F, IP)

**CSED 4217. Readings in Family and Consumer Science Education. (3).** (A-F, IP)

**CSED 4300-6300. Family Resource Management. (3).** Investigates values, goals, and human and material resources necessary for individuals and families to make informed management decisions throughout the life span.

**CSED 4304-6304. Trends in Housing and Home Furnishings. (3).** Major trends and influences on contemporary residential furnishings as these affect home furnishings merchandising. PREREQUISITE: CSED 2104.

**CSED 4314. Contemporary Trends in Housing/Home Furnishings. (3).** Multi-cultural and global trends of the 20th century on housing and home furnishings; emphasis on major design influences as they relate to housing/home furnishings.

**CSED 4322. Advanced Food Systems and Beverage Management. (3). (Same as HPRM 4322).** Foundations of managing restaurants and associated beverage operations; planning and control procedures, human resources management, customer service, marketing strategies, and emerging technologies; relationship between food and beverage operations and overall hospitality organization. PREREQUISITE: CSED 2302, MGMT 3110, MKTG 3010, or permission of advisor.

**CSED 4332. Purchasing and Financial Management of Food Systems. (3).** Problem solving related to food and beverage purchasing decisions; budgeting for food services; managerial finance, productivity indicators. PREREQUISITE: ACCT 2010, CSED 3502, and completion of University General Education Program MATH requirement.

**CSED 4383-6383. Materials and Methods in Family and Consumer Sciences Education. (3).** Methods in high school subjects with an

emphasis in Consumer Science and Education Instruction. PREREQUISITE: permission of instructor.

**CSED 4393-6393. Occupational Methods in Family and Consumer Sciences Education. (3).** Special emphasis on instructional strategies and evaluation through classroom and on-site participation. PREREQUISITE: CSED 4383 and permission of instructor.

**CSED 4405-6405. Textiles. (3).** Selection, use, and care of textiles related to properties of fibers, yarn structures, fabric construction, and finishes; morphology and chemistry of fibers, finishes, dyes, fabric maintenance, and procedure involved in fiber, yarn, and fabric identification. PREREQUISITE: CSED 2005, 2104, or permission of instructor.

**CSED 4600. Senior Seminar in Merchandising. (6).** Concentrated study of factors influencing fashion and home furnishings merchandising functions and transitional process from career academics to career implementation. Meets first six weeks of semester. PREREQUISITE: Students are required to complete all coursework in concentration, (and minor) prior to professional semester. Approved application for admission must be received before exam week of previous semester. COREQUISITE: Fashion Concentration-CSED 4705; Home Furnishings Concentration-CSED 4804.

**CSED 4602-6602. Community Nutrition. (3).** Nutritional problems and practices of diverse ethnic, age, and socio-economic groups; educational skill development for intervention; local regional, national, international agencies that address these nutritional needs. PREREQUISITE: CSED 2202, or permission of instructor.

**CSED 4702-6702. Food Production Internship. (3).** Supervised field experience in the field of food production management; preparation for ServSafe, a food safety and sanitation certification. (A-F, IP)

**CSED 4705. Fashion Merchandising Internship. (6).** Supervised full-time work experience in fashion merchandising in approved business establishments. Meets last 8 weeks of semester. Majors may not enroll for more than a total of 12 semester hours during professional semester. COREQUISITE: CSED 4600. (S/U).

**CSED 4712-6712. Clinical Nutrition Internship. (3).** Supervised field experience in clinical nutrition. PREREQUISITE: CSED 4102. (S/U)

**CSED 4722-6722. Catering Internship. (3).** Supervised field experience in the field of catering. (A-F, IP)

**CSED 4802. Experimental Foods. (3).** Technology related to chemical properties of foods and the development of new food products; critical thinking and problem solving skills used in the preparation and evaluation of food products. *Two lecture hours, two laboratory hours per week.* PREREQUISITE: CSED 2302, CHEM 1110, 3311, or permission of instructor.

**CSED 4804. Home Furnishings Merchandising Internship. (6).** Supervised full-time work experience in home furnishings merchandising in approved business establishments. Meets last 8 week of semester. Majors may not enroll for more than a total of 12 semester hours during professional semester. COREQUISITE: CSED 4600. (S/U).

**CSED 4812. Advanced Human Metabolism. (3).** Biochemistry as it applies to dietetics; generation, storage, use of energy; metabolism of carbohydrate, protein, fat and other macro/micro nutrients; control of metabolic processes in normal, anabolic, catabolic conditions.

**CSED 4900-4906-6900-6906. Consumer Science Study Tour. (1-3).** On-the-scene knowledge about specific academic areas of specialization within Consumer Science and Education. PREREQUISITE: permission of instructor. Maximum of 6 credit hours for degree program.

**CSED 4900-6900. Study Tour in Consumer Science and Education. (1-3).** (S/U).

**CSED 4902-6902. Study Tour: Foods and Nutrition. (1-3).**

**CSED 4904-6904. Study Tour: Housing and Home Furnishings. (1-3).**

**CSED 4906-6906. Study Tour: Fashion Merchandising. (1-3).**

**CSED 4920-29-6920-29. Special Topics in Consumer Science and Education. (1-3).** Lectures and conferences covering selected areas of current interest. Topics are varied and in online class listings. May be repeated. Credit applicable to degree is limited.

**CSED 4940-49. Workshop in Family and Consumer Science and Education. (1-3).** Group study related to specific phases of Family and Consumer Science Education. May be repeated.

## (DANC) DANCE

### Department of Theatre and Dance

ROBERT A. HETHERINGTON, M.A., *Chair*
*Room 143D, Theatre and Communication Building*

DANC 1821, 1825, 1827, 2821, 2825, and 2827 may be used to fulfill the University degree requirements for physical activity courses. See Graduation from the University section for details.

**DANC 1151. Introduction to Dance. (3).** Comprehensive study of dance as an expressive art form, a symbolic language, and an integral aspect of world cultures; emphasis on developing both aesthetic response and critical skills through an analysis of major dance forms, styles, and genres. **[G]** ♦

**DANC 1821. Modern Dance I. (2).** Introduction to modern dance techniques; emphasis on exploration of fundamentals of dance. For students with little or no previous experience in modern dance. May be repeated for a maximum of 4 hours credit with permission of instructor. **[G]**

**DANC 1825. Ballet I. (2).** Introduction to classical ballet technique; emphasis on barre and center floor work. For students with little or no previous experience in ballet. May be repeated for a maximum of 4 hours credit with permission of instructor. **[G]**

**DANC 1827. Jazz Dance I. (2).** Contemporary jazz dance techniques; emphasis on fundamentals of idiom. For students with little or no previous experience in jazz dance. May be repeated for a maximum of 4 hours with permission of instructor. **[G]**

**DANC 2101. Dance Improvisation. (3).** Elements of space, time and force; their interrelationships and their specific applications to movement sequences; experiences in spontaneous development of dance phrases. May be repeated for a maximum of 6 hours credit. **(Offered alternate years).** PREREQUISITE: permission of instructor.

**DANC 2821. Modern Dance II. (3).** Intermediate modern dance techniques. May be repeated for a maximum of 15 hours credit. PREREQUISITE: permission of instructor. **[G]**

**DANC 2825. Ballet II. (2).** Intermediate ballet techniques. May be repeated for a maximum of 14 hours credit. PREREQUISITE: permission of instructor. **[G]**

**DANC 2827. Jazz Dance II. (2).** Intermediate jazz dance techniques. May be repeated for a maximum of 14 hours credit. PREREQUISITE: permission of instructor. **[G] [W]**

**DANC 3101. History of Dance. (3).** Basic features of and uses for dance and expressive movement from early cultures to present. **(Offered alternate years). [W]**

**DANC 3201. Dance Movement Analysis. (3).** Theory and methods of analyzing and describing dance movement. Varied semester topics: dance notation, Laban movement analysis, Bartenieff fundamentals, rhythmic analysis, kinetic awareness and body alignment techniques. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor. **(Offered alternate years).**

**DANC 3825. Ballet III. (2).** Advanced ballet technique. May be repeated for a maximum of 14 hours credit. PREREQUISITE: permission of instructor.

**DANC 3829. Advanced Dance Techniques. (3).** Intensive development and refinement of dance technique. Focus on artistic concerns appropriate to advanced level. May be repeated for a maximum of 15 hours credit. PREREQUISITE: permission of instructor.

**DANC 4000-4029-6000-6029. Special Topics in Dance. (1-3).** Topics are varied and in online class listings. May be repeated for a maximum of 9 hours credit.

**DANC 4101-6101. Dance Repertory. (3).** Exploration of stylistic, technical, and expressive elements in rehearsal and performance; notated works, faculty and guest artist choreography. May be repeated for a maximum of 9 hours credit. PREREQUISITE: permission of instructor.

**DANC 4201-6201. Dance Composition. (3).** Investigation of movement sources and development of elements of choreographic craft. Emphasis on solo and duet work. May be repeated for a maximum of 6 hours credit. **(Offered alternate years).** PREREQUISITE: permission of instructor.

**DANC 4202-6202. Advanced Dance Composition. (3).** Continued investigation of movement sources and choreographic craft from concept development through rehearsal and performance; emphasis on group forms. May be repeated for a maximum of 6 hours credit. PREREQUISITE: DANCE 4201, or permission of instructor. **(I)**

**DANC 4301-6301. Directed Studies in Dance. (1-3).** Individual study, research or practicum. May be repeated for a maximum of 12 hours credit. PREREQUISITE: permission of instructor.

**DANC 4402-6402. Dance Education in Diverse Settings. (3).** Theory, methods and materials for teaching modern and creative dance in schools, dance studios, arts programs, and community settings; current research in aesthetic education and curriculum development. PREREQUISITE: DANC 2821, or permission of instructor.

## (DSP) TRANSITIONAL ACADEMIC STUDIES

### DEVELOPMENTAL STUDIES PROGRAM

*http://www.people.memphis.edu/~dstudies*

Developmental Studies courses are taught by Southwest Tennessee Community College faculty on The University of Memphis campus.

**DSPM 0700. Basic Mathematics. (3). (TRAC 0720, R&DS 0720).** Real numbers and number operations, ratio and proportion, percent, measurement, geometry, variables, equations, and applications. *Three lecture hours per week.* Credit earned will not apply toward degree credit. ♦

**DSPM 0800. Elementary Algebra. (3). (TRAC 0820).** Real numbers, their properties, variables, solving equations, polynomials, factoring, linear equations, systems of linear equations, graphing linear equations in two variables, inequalities, quadratic equations, and applications. *Three lecture hours per week.* Credit earned will not apply toward degree credit. ♦

**DSPM 0850. Intermediate Algebra. (3). (TRAC 0821).** First and second degree equations, linear equations in two variables, polynomials, rational expressions, exponents and radicals, systems of equations, graphing linear equations, inequalities, and applications. *Three lecture hours per week.* Credit earned will not apply toward degree credit. ♦

**DSPR 0700. Critical Reading I. (3). (TRAC 0740).** Essential reading skills needed as foundation for critical reading skills; emphasizes word attack skills, general vocabulary development, comprehension, and increased reading rate. *Three lecture hours per week.* Credit earned will not apply toward degree credit. ♦

**DSPR 0800. Critical Reading II. (3). (TRAC 0840).** Critical reading skills prerequisite for comprehension of college texts; emphasizes increased development of general vocabulary as well as technical and specialized vocabularies. Comprehension with special attention directed toward critical reading skills and improvement of reading flexibility and reading rate. *Three lecture hours per week.* Credit earned will not apply toward degree credit. ♦

**DSPS 0800. Developmental Study Skills. (3). (TRAC 0830).** Necessary reasoning and study skills for college level work; emphasizes critical thinking skills and efficient study techniques. *Three lecture hours per week.* Credit earned will not apply toward degree credit. ♦

**DSPW 0700. Basic Composition. (3). (TRAC 0710).** Practice in developing paragraphs and compositions; extensive work on competencies in grammar, punctuation, and mechanics through numerous writing assignments. *Three lecture hours per week.* Credit earned will not apply toward degree credit. ♦

**DSPW 0800. Developmental Composition. (3). (TRAC 0810).** Expository writing; emphasis on focus, development, organization, and revision of composition; practice with grammar, sentence structure, punctuation, and mechanics. *Three lecture hours per week.* Credit earned will not apply toward degree credit. ♦

## (ECED) EARLY CHILDHOOD EDUCATION

### Department of Instruction and Curriculum Leadership

DENNIE L. SMITH, Ed.D., *Chair*
*Room 106D, E.C. Ball Hall*

*http://www.coe.memphis.edu/coe/ICL/icl.html*

**ECED 3555. Observation and Assessment of Infant and Early Childhood Development. (3).** Developmental perspective on measurement and evaluation in early childhood years. Considers standardized tests, observations, checklists and rating scales, and tests designed by teachers; their advantages and disadvantages for use with young children; and professional ethical issues pertaining to evaluating young children. PREREOUISITE: EDPR 2111, and admission to TEP. PREREQUISITE or COREQUISITE: EDPR 4301. **[C]**

**ECED 4500. Emergent Literacy and Language Development. (3).** Cognitive view in developmental perspective of language development and literacy; processes from birth to age five; materials and methods of teaching and assessing language development and emergent literacy from a sociocultural perspective. Required field experiences in multi-cultural settings. PREREQUISITE: ECED 3555 and admission to TEP.

**ECED 4510-6510. Foundations of Early Childhood Education. (3).** Early childhood profession, its multiple historical, philosophical, and social foundations; current issues, trends and public policies affecting children, families and programs for young children and the early childhood profession; exploring early childhood teacher roles and responsibilities through observations in multi-cultural settings. Ten hours field experience required. PREREQUISITE: admission to TEP. **(F,Sp).**

**ECED 4515. Teaching and Learning in Early Childhood Education. (3).** Developmentally appropriate teaching and learning methods with emphasis on the teacher's role as facilitator; fostering development and learning through play; creating appropriate, psychologically safe and healthy learning environments; fostering individual and group interactions. PREREQUISITE: EDPR 4301, ECED 3555, and admission to TEP. PREREQUISITE or COREQUISITE: ECED 4510.

**ECED 4520-6520. Planning and Facilitating Social Learning and Development. (3).** Planning, implementing, and evaluating young children's social learning and development from birth through age nine; socialization and social science skills, knowledge, dispositions in context of integrating instruction and learning with other curriculum areas. Thirty hours field experience required. PREREQUISITE: ECED 3555, 4510 and admission to TEP. COREQUISITE: minimum of one hour of credit from ECED 4525.

**ECED 4525. Practicum in Early Childhood Teaching and Learning. (1-3).** Planning, implementing, evaluating early childhood methods and materials in K-4 classes. PREREQUISITE: ECED 4510 and admission to TEP. COREQUISITE: ECED 4520 **(Sp)** and ECED 4530 **(F)**. (A-F, IP)

**ECED 4530-6530. Planning and Facilitating Math and Science Learning. (3).** Teacher knowledge, skills, and dispositions necessary to plan for and facilitate development and learning of physical, logico-mathematical, social knowledge of math and science for children from birth through nine years. Forty-five hours field experience required. PREREQUISITE: ECED 4520 and admission to TEP. COREQUISITE: a minimum of two hours credit from ECED 4525.

**ECED 4540-6540. Infant and Toddler Development and Care. (3).** Foundations for models, principles, curriculum and practices of developmentally appropriate infant toddler caregiving; emphasis on teacher's knowledge of child development, skills and dispositions necessary to foster infant and toddler development in group care settings. Ten hours field experience required. PREREQUISITE: EDPR 4301 and admission to TEP. **(F).**

## (ECON) ECONOMICS

JULIA A. HEATH, Ph.D., *Chair*

*Room 400, Fogelman College of Business and Economics Administration Building*

**Students must have junior standing and have met specific course prerequisites with a minimum grade of "C" (2.0) to be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of "C" (2.0) in each, (2) minimum of 2.25 GPA (2.5 GPA for Accounting majors) in all required lower division business courses and MATH 1830, and (3) 55 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements).**

**A surcharge of $10.00 per credit hour for 3000 and 4000 level courses and $20.00 per credit hour for 6000-9000 level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).**

**ECON 2110. Introduction to Macroeconomics. (3).** Nature and functions of the national economy in a global context. Includes consumption and investment behavior, national income and product determination, fiscal and monetary policy, and international trade. [G]

**ECON 2120. Introduction to Microeconomics. (3).** Operation of the market economy at the individual and firm level; supply and demand analysis, consumer behavior, behavior of firms in both competitive and monopoly environments, income distribution theory, and effects of government intervention in the market economy. [G]

**ECON 3010. East Asia in the Global Economy. (3).** Process and consequences of integrating selected East Asian countries into the global economy; unique and general factors explaining recent success; economic adjustments in both advanced and developing countries needed for their integration; environmental impact of increased demand for resources.

**ECON 3020-29. Special Topics in Economics. (3).** Current economic issues and problems in the United States; emphasis on application of tools and analytical methods. Topics are varied and in online class listings. PREREQUISITE: ECON 2110, 2120.

**ECON 3210. Labor Economics. (3).** Introduction to institutional aspects of American labor force and its organization wage and employment theory, economic role of collective bargaining, and basic ingredients of public policy toward labor organization. PREREQUISITE: ECON 2120.

**ECON 3310. Microeconomic Theory. (3).** Intermediate approach to price theory; stress on market mechanism as device for resource allocation; attention to uses of basic microeconomic concepts in analysis of economic problems and in formulation of policy. PREREQUISITE: ECON 2120.

**ECON 3320. Macroeconomic Theory. (3).** Intermediate approach to social income accounting and to functional relationships between important aggregate economic variables as well as to forecasting and social policy implications. PREREQUISITE: ECON 2110.

**ECON 3411. Economics of Social Issues. (3).** Applications of economic theory and analysis to current social problems, and evaluation of current and potential policy solutions to social issues.

**ECON 3580. International Economic Development: An Ecological Perspective. (3).** Process of economic development as adaptive interplay between man's needs and ways in which environment is exploited to satisfy those needs in both developed and less developed countries. PREREQUISITE: ECON 2110, or permission of instructor.

**ECON 3610. Money and Banking. (3).** Monetary and banking history of leading countries with special emphasis on theory of money and banking in United States, deposit and earnings operations of individual banks, interbank and central bank relations. PREREQUISITE: ECON 2110.

**ECON 4111. Managerial Economics. (3).** Direct application of economics to common business problems; economic framework and empirical techniques of production and cost analysis, project evaluation, pricing, and demand analysis. PREREQUISITE: MATH 1830, ECON 2120, 2749, 2755.

**ECON 4112. Organizational Economics. (3).** Analysis of markets and organizations, competitive advantage, production and cost, consumer and market demand, strategic management decision-making, decision rights, incentives and rewards, and structure of performance systems. PREREQUISITE: MGMT 3110, ECON 2120 and senior standing.

**ECON 4120. Economic Forecasting. (3).** Current economic thinking on problems of recession and inflation as background to economic forecasting; methodologies of forecasting analyzed with examples of each. PREREQUISITE: ISDS 3711, or equivalent.

**ECON 4130-6130. Government Regulation of Business. (3).** Approaches to legal and legislative control of business, especially tax laws, commission regulations, and antimonopoly legislation in view of impact of each on industrial operating policy. PREREQUISITE: ECON 2120.

**ECON 4340. Comparative Economic Systems. (3).** Factors contributing to differential performance of economic systems, including property rights, information flow, incentive structure, management-labor relations, government policies on technology and competitiveness; emerging trends of system convergence and corporate globalization. PREREQUISITE: ECON 2120.

**ECON 4350. International Economics. (3).** Historical approach to theory of international trade; consideration given to Classical, Neo-Classical and Modern approach to trade theory with emphasis on policy implications of the analysis. PREREQUISITE: ECON 2120, or equivalent.

**ECON 4351. International Monetary Economics: Theory and Policy. (3).** Open economy macroeconomics; examination of payments among nations, foreign exchange markets, determinants of exchange rate policies; national income and foreign exchange, internal and external balance and international factor movements. PREREQUISITE: ECON 2110.

**ECON 4410. Development of Economic Thought. (3).** Historical development of economic thought; attention primarily on emergence of Classical and Neoclassical thought, several dissident schools of thought, and twentieth-century economic thought. PREREQUISITE: ECON 2110.

**ECON 4620. Mathematical Economics. (3).** Introduction to way in which basic mathematical tools are used by economists; applications to consumer theory, production theory, market structures, macroeconomic theory. PREREQUISITE: ECON 2110, 3310, and one semester of calculus, or permission of instructor.

**ECON 4740. Health Care Economics. (3).** Unique nature of health care as economic good, health care market and its participants including patients, physicians, and hospitals, and financing and delivery of personal health care in United States and other countries.

**ECON 4760-69-6760-69. Special Topics in Economics. (1-3).** Topics are varied and in online class listings. May be repeated with change in topic. PREREQUISITE: permission of department chair.

**ECON 4810-6810. Quantitative Economic Analysis. (3).** Introduction to application of mathematical tools in business and economics; review of matrix algebra, differential and integral calculus; optimization with and without constraints; comparative statistics.

**ECON 4820. Econometrics. (3).** Introduction to statistical procedures used to estimate and test quantitative economic theories, using microcomputer software for regression analysis.

**ECON 4910. Problems In Economics. (1-3).** Students investigate issues surrounding selected economic problems and develop reports of that investigation. May be repeated for maximum of 3 hours credit. PREREQUISITE: upper division standing and approval of department chair. (A-F, IP)

**ECON 4911. Internship In Economics. (1-6).** Internship in business organization to gain on-the-job experience. Project to be approved and supervised by department faculty. Credit allowed only after acceptance of report. PREREQUISITE: have successfully completed at least 15 hours of upper division business courses with a 2.75 GPA in these upper division courses. (A-F, IP)

**ECON 4920. Senior Seminar In Economics. (3).** Coordinated by department coordinator and conducted by selected members of department; integrate several fields and course areas pursued by undergraduate majors into meaningful whole. **[I]**

**ECON 4996. Honors Thesis In Economics. (3).** Independent research open only to students enrolled in Economics Honors Program. Honors thesis supervised by three-faculty committee selected by student and approved by Economics Honors Committee. PREREQUISITE: permission of Economics Honors Committee. (A-F, IP)

## (EDPR) EDUCATIONAL PSYCHOLOGY AND RESEARCH

### Department of Counseling, Educational Psychology and Research

RONNIE PRIEST, Ph.D., *Chair*
*Room 100, E.C. Ball Hall*

*http://www.coe.memphis.edu/coe/CEPR/cepr.html*

**EDPR 2111. Development Across the Life Span. (3).** Principles and processes of human development across the life span.

**EDPR 3121. Learning Processes and Assessment. (3).** Major theories and perspectives on classroom learning and classroom assessment practices; emphasis on cognitive processes, individual differences, strategies for instruction, motivation, critical thinking, and self regulation of learning; developing and using classroom assessment and interpreting standardized testing. PREREQUISITE: EDPR 2111, or permission of instructor.

**EDPR 3300. Infant Development. (3).** Theories, philosophies, research, and pedagogy relating to optimal development and education of infants and toddlers. PREREQUISITE: EDPR 2111, or permission of instructor.

**EDPR 3301. Early Childhood Development. (3).** Theories, research, and pedagogy which facilitate the cognitive, socio-emotional, and physical stages of children's development from 3-8 years of age. PREREQUISITE: EDPR 2111 or permission of instructor.

**EDPR 3302. Child and Adolescent Development. (3). (Same as CSED 3302).** Principles and processes of child and adolescent development applied to education. PREREQUISITE: EDPR 2111, or permission of instructor.

**EDPR 4008. Special Problems in Educational Psychology and Research. (1-3).** Individually directed reading, field study or research; written report required. PREREOUISITE: permission of instructor. (A-F, IP)

**EDPR 4301. Early Childhood Development for the Beginning Teacher. (3).** Philosophy, theory, research, and pedagogy relating to the physical, cognitive, social, and emotional development of children from birth to eight years of age. PREREQUISITE: EDPR 2111 and TEP admission.

**EDPR 4541. Fundamentals of Applied Statistical Methods. (3).** Use of statistical techniques in education and behavioral sciences; emphasis on practical use and interpretation of concepts. Self-instructional. [C]

## (EDSV) EDUCATIONAL SERVICES

### Department of Instruction and Curriculum Leadership

DENNIE L. SMITH, Ed.D., *Chair*
*Room 106D, E.C. Ball Hall*

*http://www.coe.memphis.edu/coe/ICL/icl.html*

**EDSV 4750. Special Problems: Educational Services. (1-3).** Independent study and field projects on selected problems, interests, and needs related to educational programs in training settings. (A-F, IP)

**EDSV 4850. Practicum in Training Settings. (1-3).** Opportunities to gain experience in a variety of settings; tailored to interests, needs and career pathways of student. PREREQUISITE: approval by program coordinator. (S/U).

**EDSV 4950. Internship in Training Settings. (3-12).** Planned and supervised full-time experience in a training setting appropriate to the student's specialization area; opportunities to synthesize knowledge and skills and demonstrate professional competencies in an appropriate setting. PREREQUISITE: approval in advance by program director. COREQUISITE: EDSV 4800. (S/U).

## (EECE) ELECTRICAL and COMPUTER ENGINEERING

BABAJIDE O. FAMILONI, Ph.D., *Chair*
*Room 206, Engineering Science Building*

*http://www.ee.memphis.edu/*

Undergraduate and graduate level engineering courses require an additional $20 per credit hour.

**EECE 1202. Electrical and Computer Engineering Concepts. (3). (ELEC).** Introduction to basic electrical engineering concepts and models; DC circuits; introduction to computers and computer ethics; use of text processors and spreadsheets. PREREQUISITE: MATH 1710 or 1730.

**EECE 1207. Electrical and Computer Engineering Computations. (3). (ELEC).** Structured solutions to electrical problems through use of computers. PREREQUISITE: EECE 1202, or sophomore standing.

**EECE 1208. Introduction to Computer Engineering Laboratory. (1). (ELEC).** Laboratory techniques in solutions to computer engineering problems; software/hardware development tools. COREQUISITE: EECE 1207.

**EECE 2201. Circuit Analysis I. (3). (ELEC).** Fundamental properties of electrical circuits; basic concepts and circuit elements; network theorems; steady-state and transient analyses. PREREQUISITE: MATH 2110. COREQUISITE: MATH 3120.

**EECE 2203. Circuit Analysis Laboratory. (1).** Introduction to utilization of meters, oscilloscopes, oscillators, power supplies, and related test equipment in experimental verification of basic electric circuit theory. COREQUISITE: EECE 2201.

**EECE 2222. Digital Circuit Design. (4). (ELEC).** Review of number systems and base conversions; analysis and design of digital circuits; logic and sequential design; introduction to microprocessors and modern CAD tools; VHDL. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: EECE 1207.

**EECE 2281. Electrical Engineering and Instrumentation Laboratory. (1).** Introduction to basic meters, power supplies, test equipment; transient responses and AC power measurements; operational amplifier circuits, bridge circuits and transducers. Does not fulfill degree requirements for Electrical Engineering or Computer Engineering majors. *Three laboratory hours per week.* COREQUISITE: EECE 2283.

**EECE 2283. Electrical Engineering and Instrumentation. (3).** Analysis of electrical circuits, sinsoidal steady state analysis, instrumentation circuits, op amps, transducers. Does not fulfill degree requirements

for Electrical Engineering or Computer Engineering majors. PREREQUISITE: MATH 1920 and PHYS 2120.

**EECE 3201. Circuit Analysis II. (4). (ELEC).** Laplace transform techniques for network analysis, sinusoidal steady-state response of single and three phase circuits, resonant circuits, linear transformers and magnetic coupling, and introduction to filter design. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: EECE 2201, MATH 3120.

**EECE 3202. Transform Methods in Network Analysis. (3). (ELEC).** Introduction to transform theory; Fourier Series; application of Fourier, Laplace and Z-transforms to solution of network problems. PREREQUISITE: EECE 2201, MATH 3120. **[C]**

**EECE 3211. Electronics I. (3). (ELEC).** Solid state devices as elements of electronic circuits; linear models and linear operation of these devices emphasized. PREREQUISITE: EECE 2201. **[C]**

**EECE 3212. Electronics II. (4). (ELEC).** Utilization of devices in linear, non-linear, and switching modes of operation; modeling and simulation of electronic circuits. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: EECE 2222, 3201, 3211, 3213.

**EECE 3213. Electronics I Laboratory. (1). (ELEC).** Emphasis on laboratory techniques in performance of basic electronic experiments. COREQUISITE: EECE 3211.

**EECE 3220. Computer Software Engineering. (3). (ELEC).** Introduction to software engineering; metrics, estimation, and planning; system and software requirements analysis; hardware-software interactions and effects on the design process; software design and implementation techniques; software integrity issues, quality assurance, testing, reliability and maintenance; software development tools. PREREQUISITE: COMP 3160 or permission of instructor.

**EECE 3221. Matrix Computer Methods in Electrical Engineering. (3). (ELEC).** Fundamentals of matrix theory; application of matrix theory and digital computer techniques to the solution of circuit problems; state equations and their application to the solution of systems of differential equations. PREREQUISITE: EECE 2201. **[C]**

**EECE 3240. Electromagnetic Field Theory. (3). (ELEC).** Maxwell's equations electrostatics, magnetostatics and time varying electromagnetic fields and waves. PREREQUISITE: MATH 3120. **[C]**

**EECE 3270. Introduction to Microprocessors. (4). (ELEC). (4270).** LSI circuitry, microprocessor architecture, hardware and software, application and system design. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: EECE 2222.

**EECE 4201. Energy Conversion. (3). (ELEC).** Energy conversion by electromechanical processes, energy relations in magnetic systems, mathematical modeling of magnetic systems, transformers and electrical machines. PREREQUISITE: EECE 2283 or 3201. **[C]**

**EECE 4202-6202. Electrical Power Systems. (3). (ELEC).** Investigation of problems associated with transmission of electrical energy; load-flow studies, and fault analysis by use of symmetrical components. PREREQUISITE: EECE 3221.

**EECE 4203. Energy Conversion Laboratory. (1). (ELEC).** Fundamental properties associated with testing and utilization of direct current and of alternating current equipment such as motors, generators, alternators and transformers. COREQUISITE: EECE 4201.

**EECE 4204-6204. Power Distribution Systems. (3). (ELEC).** Distribution of power from transmission systems to users; primary and secondary feeders, voltage regulation; distribution transformers; overhead, underground and network distribution system design; lightning phenomena and protective device coordination. PREREQUISITE: EECE 4201, 4203.

**EECE 4213-6213. Antenna Theory and Design. (3). (ELEC).** Theory of operation and design of antennas; determination of antenna radiation characteristics; introduction to antenna array theory. PREREQUISITE: MATH 3120.

**EECE 4214. EM Fields Laboratory. (1).** Laboratory techniques associated with frequencies above 100 MHz. COREQUISITE: EECE 4215.

**EECE 4215-6215. EM Fields Applied to Telecommunications. (3).** Steady state and transient solutions of transmission line equations; plane waves; antennas in telecommunications. PREREQUISITE: MATH 3120.

**EECE 4221-6221. Electronics III. (4). (ELEC).** Applications of analog and digital electronic circuits; special purpose circuits and devices. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: EECE 3211.

**EECE 4222-6222. Digital Logic and Computer Design. (3). (ELEC).** Applications of digital system design using MSI, LSI, and VLSI circuits; design of arithmetic logic units, multiple-input controllers, and practical interfacing techniques. PREREQUISITE: EECE 2222.

**EECE 4230-6230. Data Communication Systems. (3). (ELEC).** Data communications in information and computing systems; analog and digital means of transmitting and controlling information; organization and requirements of data communication systems including modulation and demodulation, multiplexing, switching, error detection and correction. PREREQUISITE: EECE 3202.

**EECE 4231-6231. Communication Theory. (3). (ELEC).** Frequency and time domain; modulation, random signal theory, autocorrelation; noise, communication systems. PREREQUISITE: EECE 3202, or permission of instructor.

**EECE 4232-6232. Discrete Signal Processing. (3).** Introduction to discrete-time signal analysis; includes discrete system concepts, discrete-time Fourier analysis, sampling of continuous-time signals, z-transform, and transform analysis of discrete time systems; structures for discrete-time systems and discrete filter design techniques. PREREQUISITE: EECE 3202.

**EECE 4235-6235. Random Signal Analysis. (3). (ELEC).** Analysis of signals using techniques of probability and statistics; introduction to probability, random processes and statistics; discrete signals and analog signals with random components are studied in time, spatial and frequency domains; autocorrelation, cross-correlation and power spectra are applied to various signals; effects of filters, both discrete and analog, are determined. PREREQUISITE: EECE 3202.

**EECE 4241-6241. Solid State Physical Electronics. (3). (ELEC).** Quantum concepts; statistics; crystal structure; conduction processes in solids; p-n junctions and devices; field-effect devices; charge transfer devices. PREREQUISITE: EECE 3211. **[C]**

**EECE 4242-6242. Electro-Optics. (3). (ELEC).** Classical optics including Gaussian optics, Newtonian optics, and vergence theory; optical design with aberration concepts, F-numbers, pupils, and stops; radiometry with respect to flux transfer calculations; light sources and detectors.

**EECE 4243-6243. Linear Optical Systems. (3). (ELEC).** Review of Fourier techniques for analysis and design of linear systems, extension to 2-dimensional techniques, 2-dimensional transform applied to linear optical systems and optical data processing. PREREQUISITE: EECE 3202.

**EECE 4251-6251. Control System Engineering. (3). (ELEC).** General equations of physical linear systems and their transfer functions; transient analysis and stability of servo systems; Bode plot, Nichols chart, Nyquist plot, Routh criterion, root locus methods, introduction to compensation techniques and systems in state space. PREREQUISITE: EECE 3202, 3221.

**EECE 4252-6252. Digital Control Systems. (3). (ELEC).** Problems and analysis techniques applicable to digital control systems. Prior knowledge of Laplace transforms required; basic knowledge of feedback control theory desirable. PREREQUISITE: EECE 3202, 3221.

**EECE 4253-6253. Control Systems Laboratory. (1). (ELEC).** Investigations of fundamental properties associated with control systems engineering; laboratory procedures in analysis of control systems, compensating networks, analog and digital computer simulations. COREQUISITE: EECE 4251 or 4252.

**EECE 4254-6254. Digital Control Systems Laboratory. (1). (ELEC).** Investigations of fundamental properties associated with digital control systems engineering; laboratory procedures in analysis of digital control systems, compensating networks, digital computer simulations and PLCs. COREQUISITE: EECE 4252.

**EECE 4271. Computer Interfacing.(3). (ELEC).** Hardware and software aspects of connecting computers to peripherals; tradeoffs between hardware and software; connecting CPUs to ROM, RAM, parallel ports and serial ports; applications to serial and parallel ports; backplane buses, displays, keyboards, A/D and D/A converters; linking interface routines to application software. PREREQUISITE: EECE 2222, or permission of instructor.

**EECE 4272-6272. Engineering Software. (3). (ELEC).** Procedural and object-oriented programming techniques using C and C++. Introduction to UNIX. PREREQUISITE: EECE 3221, or equivalent.

**EECE 4273-6273. Database Engineering. (3). (ELEC).** Logical database design, data models for database engineering; entity-relationship, relational, object oriented, logic data models; design theory for relational databases, relational query languages, introduction to integration of database and knowledge-base systems for engineering applications; emerging trends in database machine design and implementation. PREREQUISITE: permission of instructor.

**EECE 4274-6274. Software Design with Ada. (3). (ELEC).** Introduction to Ada; detailed software design methodology using structured and object oriented techniques for large systems; reusable components, Ada Programming Support Environment. PREREQUISITE: knowledge of a structured high level language.

**EECE 4275-6275. Network Programming. (3). (ELEC).** Introduction to engineering of computer networks, network hardware, and network software; design of software systems for network applications. PREREQUISITE: EECE 1207 and EECE 3221.

**EECE 4276-6276. Advanced Network Programming. (3). (ELEC).** Advanced methods for engineering software systems; implementations of distributed object models, remote database connectivity, and reusable software components. PREREQUISITE: EECE 4275, or permission of instructor.

**EECE 4277-6277. DSP Microprocessors. (4). (ELEC).** Architecture and instruction sets of fixed-point and floating-point devices; hardware interfacing, host communication, real-time signal generation, filtering, and code development using assembly language and C. PREREQUISITE: EECE 2222 and EECE 3202.

**EECE 4278-6278. Computer Organization. (3).** Organization and structure of CPU, memory, operating system, I/O system organization and implementation issues; hardware and software integration and co-design. PREREQUISITE: EECE 2222, and either COMP 2150 or EECE 4272.

**EECE 4280. Electrical and Computer Engineering Design. (3). (ELEC).** Individual and/or team design projects that require application of electrical engineering or computer engineering concepts. Oral and written presentations required. PREREQUISITE: ENGL 3603, EECE 3202, and either EECE 3212, 3220, or 4221. **[W, I]**

**EECE 4720-6720. Introduction to Artificial Intelligence (3). (ELEC). (Same as COMP 4720).** Fundamentals of programming in LISP; central ideas of artificial intelligence, including heuristic search, problem solving, slot-and-filler structures, and knowledge representation. PREREQUISITE: EECE 3221, or permission of instructor.

**EECE 4730-6730. Expert Systems. (3). (ELEC). (Same as COMP 4730).** Fundamentals of programming in PROLOG, central ideas of expert system development, including knowledge representation, control structures, tools, knowledge acquisition, and knowledge engineering. PREREQUISITE: EECE 3221, or permission of instructor,.

**EECE 4900-09-6900-09. Special Topics in Electrical and Computer Engineering. (1-3). (ELEC).** Topics are varied and in online class listings.

**EECE 4910-19. Honors Special Topics. (3). (ELEC).** Topics are varied and in online class listings. PREREQUISITE: Approval by the Honors Committee of the Department of Electrical Engineering.

**EECE 4991. Electrical and Computer Engineering Projects I. (1-3). (ELEC).** Independent investigation of problem selected in consultation with instructor; report required. PREREQUISITE: senior standing with a minimum GPA of 2.0 in EECE courses completed at The University of Memphis. (A-F, IP)

**EECE 4992. Electrical and Computer Engineering Projects II. (1-3). (ELEC).** Design, implementation and testing of project investigated in EECE 4991; report required. PREREQUISITE: EECE 4991 with a minimum GPA of 2.0 in EECE courses completed at The University of Memphis. (A-F, IP)

**EECE 4993. Research Studies. (3). (ELEC).** Consultation, reading, and design work to investigate selected areas of electrical engineering or computer engineering under supervision of faculty member; formal paper required; emphasis on applied work, design, and scientific writing. PREREQUISITE: ENGL 3603, EECE 3202 and either EECE 3212, 4221, or 3220, and permission of department chair. **[W, I]**

**EECE 4999. Honors Thesis. (3). (ELEC).** Under the direction of a faculty member, the student writes and defends a thesis based upon background reading and experimental research on a topic in electrical engineering. PREREQUISITE: approval by the Honors Committee of the Department of Electrical and Computer Engineering. (A-F, IP)

## (EETH) ELECTRONICS ENGINEERING TECHNOLOGY

### Department of Engineering Technology

RONALD LEE DAY, M.A., *Chair*
*Room 203, Engineering Technology Building*
*http://www.people.memphis.edu/~engtech/home.html*

**EETH 1811. Electronic Circuit Technology. (3).** Introduction to fundamental electrical and electronic theory and devices, circuit and network theorems; laboratory emphasis on basic electrical measurements and proper use of instruments. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: MATH 1730, TECH 1010.

**EETH 2812. Basic Industrial Control Devices. (3).** Theory and applications of devices commonly used in modern industrial control; transistors, operational amplifiers, thyristors, and solid-state logic; applications and characteristics of motors and control system I/O devices. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: EETH 1811.

**EETH 2813. Industrial Control Systems. (3).** Theory and operation of logic control systems; relay ladder logic, solid-state logic, and programmable logic controllers; emphasis on practical industrial applications. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: EETH 2812.

**EETH 2820. Circuit Analysis. (4).** Circuit analysis methods in modern electronics engineering technology; laboratory confirmation of mathematical solutions to problems involving direct and alternating currents. Three lecture hours, three laboratory hours per week. PREREQUISITE: EETH 1811.

**EETH 2821. Solid-State Technology. (3).** Theory of solid-state devices with application in power supplies, amplifiers, and other basic electronic circuits; solid-state diodes and bipolar junction transistors emphasized. *Three lecture hours, two laboratory hours per week.* PREREQUISITE: EETH 1811.

**EETH 2831. Advanced Solid-State Technology. (3).** Theory of field effect transistors and operational amplifiers; emphasis on practical applications, including amplifiers, filters, and oscillators. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: EETH 2820, 2821, MATH 1910.

**EETH 3811. Electronics Communications. (3).** Principles of noise, oscillators, modulation and power amplifiers with associated circuitry; transmission line and antenna theory; emphasis on operating frequencies up to UHF. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: EETH 2831, TECH 3044.

**EETH 3812. Advanced Electronic Communications Technology. (3).** Concepts, systems and practical applications in generation, transmis-

sion and detection of aural data and visual information in analog and digital form. PREREQUISITE: EETH 3811.

**EETH 3821. Industrial Electronics. (3).** Electronic circuits and systems in modern industry; principles of open and closed loop control systems; theory and application of devices and thyristors such as unijunction transistors, silicon controlled rectifiers, diacs and triacs. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: EETH 2831, TECH 3044.

**EETH 3822. Programmable Logic Controllers. (4).** Theory and operation of programmable logic controllers; emphasis on practical industrial applications and programming techniques. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: EETH 3821. COREQUISITE: EETH 3841.

**EETH 3841. Electrical Power and Motor Control. (3).** Generation and utilization of AC and DC electrical power; applications and operating characteristics of motors, generators and transformers with emphasis on control of motors. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: EETH 3821. COREQUISITE: EETH 3822.

**EETH 4821. Microwave Technology. (4).** Generation and transmission of energy at frequencies above 300 megahertz, emphasizing techniques and equipment which contrast sharply with those at lower frequencies. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: EETH 3811.

**EETH 4823. Advanced Programmable Logic Controllers. (3).** Advanced applications of programmable logic controllers, including analog I/O techniques and computer interfacing. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: EETH 3822, 3841.

**EETH 4944. Senior Thesis. (3). (Same as CETH 4944, METH 4944).** Study and research in specific area culminating in an integrating experience through individual and/or group projects and technical reports. (A-F, IP) **[W, I]**

**EETH 4990-98. Special Topics. (1-3).** Topics are varied and in online class listings. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.

## (ELED) ELEMENTARY EDUCATION

### Department of Instruction and Curriculum Leadership

DENNIE L. SMITH, Ed.D., *Chair*
*Room 106D, E.C. Ball Hall*

*http://www.coe.memphis.edu/coe/ICL/icl.html*

**ELED 3251. Teaching Methods in the Sciences: Mathematics. (3).** Curriculum methods and materials for teaching mathematics with emphasis on problem solving. PREREQUISITE: admission to TEP. **[C]**

**ELED 4240. Literacy in Grades K-4. (3).** Cognitive view of literacy processes in developmental perspective; material and methods of teaching; assessing listening, speaking, reading, writing, and thinking. PREREQUISITE: admission to TEP. *Fourteen hours field experiences.* **[W]**

**ELED 4241. Literacy in Grades 5-8. (3).** Instructional strategies and assessment procedures relevant to the acquisition of reading, speaking, listening, writing, and thinking skills for students in the middle grades. PREREQUISITE: admission to TEP and ELED 4240. *Fourteen hours field experiences.*

**ELED 4242. Literacy and Language. (ELED 3241). (6).** Includes scope and sequence of skills assessment, organization strategies, materials and methods of listening, speaking, writing and reading for preschool and primary grade students; interrelatedness of these skills stressed through activities which teach children of all cultures to think and communicate. PREREQUISITE: admission to TEP. **[W]**

**ELED 4344. Literacy in the Middle Grades. (3).** Instructional strategies and assessment procedures relevant to the acquisition of reading, speaking, listening, writing and thinking skills for students in the middle grades.

**ELED 4351. Organizing for Teaching and Learning in the Early and Middle Grades. (2).** Teacher candidates develop knowledge of best practices for student learning and cognition; identify, develop, and evaluate strategies and techniques of instruction that are sensitive to individual needs of children within a culturally and economically diverse population; emphasis on planning, instruction, assessment, and professional development. PREREQUISITE/COREQUISITE: ELED 4352, 4353, 4354, admission to TEP, and completion of ALL coursework except Student Teaching and Professional Seminar. *Ten hours field experiences.*

**ELED 4352. Curriculum and Methods in the Early and Middle Grades. (4).** Teacher candidates will learn developmentally appropriate curriculum for K-8 in literacy, science, mathematics, social studies, and fine arts; methods specific to content areas and evaluate current educational materials such as software, textbooks, and manipulatives. PREREQUISITE/CORERQUISITE: ELED 4351, 4353, 4354, admission to TEP, and completion of ALL coursework except Student Teaching and Professional Seminar. *Twenty hours field experiences.* **[C]**

**ELED 4353. Thematic Instruction in the Early and Middle Grades in Urban Settings. (4).** Curriculum, methods, and materials for teaching integrated curriculum with a focus on real-world experiences with diverse students in urban settings; teacher candidates will develop and use a thematic unit to instruct K-8 students; emphasis includes critical reflection of how to improve learning and instruction for all students. PREERQUISITE/COREQUISITE: ELED 4351, 4352, 4354, admission to TEP, and completion of ALL coursework except Student Teaching and Professional Seminar. *Twenty hours field experiences.*

**ELED 4354. K-8 Practicum, Integrative Learning in Urban Settings. (2).** Integration of the curriculum and teaching for K-8 grades that includes urban site visitation experiences for observation and teaching diverse learners in real-world situations. PREREQUITE/COREQUISITE: ELED 4351, 4352, 4353, admission to TEP, and completion of ALL coursework except Student Teaching and Professional Seminar.

## (ENGL) ENGLISH

STEPHEN TABACHNICK, Ph.D., *Chair*
*Room 467, Patterson Hall*

*http://www.people.memphis.edu/~english*

All candidates for graduation at The University of Memphis are required to complete English 1010 and 1020, or their equivalents, with a minimum grade of "C". Before enrolling in English 1010, a student must have either (1) an ACT English subscore of 19 or above, or (2) an SAT verbal score of 460 or above, or (3) a satisfactory score on a placement test administered by The University of Memphis Testing Center. Those who do not meet the requirements above must successfully complete DSPW 0800 with a minimum grade of "C" before proceeding to ENGL 1010 or its equivalent. ENGL 1010 and 1020 must be taken in sequence; no credit will be allowed for ENGL 1020 until 1010 has been completed successfully. After completing ENGL 1010 and 1020 with a minimum grade of "C", all students must take ENGL 2201 or 2202.

**ENGL 0102. English as a Second Language (1-2).** Intermediate composition; practice in process of writing English expository prose, specifically paragraphs and short essays; review of grammar and sentence structure needed for academic writing skills. Open to non-native speakers of English only. Admission by placement only. (T grade allowed).

**ENGL 0103. English as a Second Language (1-3).** Advanced composition; practice in expository writing of paragraphs and essays with emphasis on the writing process; extensive reading in fiction used to encourage writing skill acquisition. Open to non-native speakers of English only. Admission by placement only. (T grade allowed).

**NOTE: The accumulation of three credit hours from the above courses and successful completion of ENGL 0103 will be considered the equivalent of ENGL 1010. Not more than 3 hours credit may be accumulated in ENGL 0102, 0103.**

**ENGL 1010. English Composition. (3). (1101).** Practice in expository writing with emphasis on content, organization, and style (levels of usage and sentence structure) for different purposes and audiences.

PREREQUISITE: DSPW 0800 with minimum grade of "C", or ACT English subscore of 19 or above, or SAT verbal score of 460 or above, or satisfactory completion of placement test. **[G]** ♦

**ENGL 1020. English Composition and Analysis. (3). (1102).** Practice in expository writing that synthesizes ideas from various readings. Includes library work and production of documented papers. PREREQUISITE: ENGL 1010 with a minimum grade of "C", or equivalent. **[G]** ♦

**ENGL 2201. Literary Heritage. (3).** Major texts of literary heritage; modes of literary expression and cultural context; emphasis on works as products of their historical contexts and as processes shaping human consciousness. Composition and critical thinking beyond levels expected of freshmen. PREREQUISITE: ENGL 1010 and 1020, with a minimum grade of "C", or their equivalent. **[G]** ♦

**ENGL 2202. Literary Heritage: African-American Emphasis. (3).** Consideration of major texts of literary heritage with emphasis on African-American culture; modes of literary expression and cultural context; emphasis on work as products of historical contexts and as processes shaping human consciousness; composition and critical thinking beyond levels expected of freshmen. PREREQUISITE: ENGL 1010 and 1020, with a minimum grade of "C" , or their equivalent. **[G]** ♦

**ENGL 1010, 1020, and 2201 or 2202 or equivalents with a minimum grade of "C" are prerequisites for all upper division courses in the Department of English.**

**ENGL 3100-19. Special Topics in Literature. (1-3).** Topics are varied and in online class listings.

**ENGL 3210. British Literature to 1798. (3).** Survey of major authors, themes, and movements from the medieval period through the 18th Century.

**ENGL 3211. British Literature of the Medieval Period. (3).**

**ENGL 3212. British Literature of the Sixteenth Century. (3).**

**ENGL 3213. British Literature of the Seventeenth Century. (3).**

**ENGL 3214. British Literature of the Restoration and Eighteenth Century. (3).**

**ENGL 3220. British Literature since 1798. (3).** Survey of major authors, themes, and movements from the Romantic period through the present.

**ENGL 3221. British Literature of the Romantic Period. (3).**

**ENGL 3222. British Literature of the Victorian Period. (3).**

**ENGL 3224. British Literature of the Twentieth Century. (3).**

**ENGL 3321. American Literature Before 1860. (3).**

**ENGL 3322. American Literature from 1860 to World War I. (3).**

**ENGL 3323. American Literature from World War I to Present. (3).**

**ENGL 3325. African American Literature through the Harlem Renaissance. (3).** Examination of works by black authors starting with the Colonial Enlightenment, continuing with slave narratives, and ending with the rise of the black novel.

**ENGL 3326. African American Literature since the Harlem Renaissance. (3).** Examination of African American literary tradition from the Harlem Renaissance to the present; Chicago writers, integrationist aesthetics of the 1950's; black aesthetics of the 1960's.

**ENGL 3401. Children's Literature. (3).** Children's literature through reading, discussion, and writing about history, characteristics, and authors of its major genres.

**ENGL 3411. European Literature to Renaissance. (3).**

**ENGL 3412. European Literature since Renaissance. (3).**

**ENGL 3500. Practical English Grammar. (3).** Extended study of the fundamentals of English grammar, sentence structure, usage, diction, punctuation, and spelling. Does not apply to the English major or minor.

**ENGL 3501. Modern English Grammar. (3).** Introduction to current grammatical theory; description of sounds, word structures, syntax, and semantics of English within theoretical frameworks.

**ENGL 3511. Introduction to Linguistics. (3).** Introduction to the nature and functions of human language, to its structural principles, and to its place in culture and society; emphasis on language diversity and change through history and contact; discussion of language and thought, origin of language, and other topics.

**ENGL 3521. The American Language. (3).** Changing nature and variety of American English, especially in vocabulary and usage, its range, formal, informal, written-colloquial, and standard and dialectal variations; shifting standards of usage especially reflected in dictionaries; and appropriateness dependent upon context; language as both reflector and shaper of thought.

**ENGL 3601. Technical and Professional Writing. (3).** Introduction to rhetoric and style of documents written by scientists, engineers, technical writers, and other professionals; extensive practice in writing reports, proposals, manuals, and correspondence. **[W]**

**ENGL 3602. Writing and Editing in the Professions. (3).** Workshop in techniques of communicating effectively in business, industry, and government; developing practical writing skills for technical publications such as reports, data analyses, and research articles; editing practices involved in packaging and distributing professional writing in printed form.

**ENGL 3603. Engineering Communications. (3).** Form and contexts of written and oral communications in engineering professions; extensive practice in oral reporting, written reports, manuals, and proposals. May not apply to the English major or minor.

**ENGL 3604. Persuasive Writing. (3).** Study and practice of writing essays and reports with emphasis on persuasion; introduction to empirical and library research, application of rhetorical principles, and nature of evidence, including numerical; academic and professional writing, editing, and revision. **[W,C]**

**ENGL 3606. Poetry Writing. (3).** Exploration of the creative process within the forms and traditions of poetry. Emphasis on student's own work. **[W]**

**ENGL 3607. Fiction Writing. (3).** Exploration of the creative process within the forms and traditions of fiction. Emphasis on the student's own work. **[W]**

**ENGL 3701. Introduction to Literary Criticism. (3).**

**ENGL 4001. Senior Honors Seminar I. (3).** Intensive study of a problem in language or literature. Enrollment limited to English honors students.

**ENGL 4002. Senior Honors Seminar II. (3).** Intensive study of a problem in language or literature. Enrollment limited to English honors students.

**ENGL 4101-10. Special Topics In English. (3).** Topics are varied and in online class listings.

**ENGL 4231. Chaucer. (3).**

**ENGL 4232. Shakespeare's Tragedies. (3).**

**ENGL 4234. Milton. (3).**

**ENGL 4235. Shakespeare's Comedies and Romances. (3).** NOTE: Students who have completed ENGL 4233 (Shakespeare's Comedies and Histories) will not receive credit for ENGL 4235.

**ENGL 4236. Shakespeare's Histories. (3).** NOTE: Students who have completed ENGL 4233 (Shakespeare's Comedies and Histories) will not receive credit for ENGL 4236.

**ENGL 4241. British Novel: Restoration Through Romantic. (3).**

**ENGL 4242. British Novel: Victorian and Modern. (3).**

**ENGL 4251. Renaissance Drama. (3).**

**ENGL 4252. Restoration and Eighteenth-Century Drama. (3).**

**ENGL 4321. American Literature: Major Writers Before 1860. (3).**

**ENGL 4322. American Literature: Major Writers Since 1860. (3).**

**ENGL 4323. Southern Literature. (3).**

**ENGL 4341. American Novel to 1900. (3).**

**ENGL 4342. American Novel Since 1900. (3).**

**ENGL 4372. Major African American Authors through the Harlem Renaissance. (3).** In-depth study of two or three authors prior to 1930, focusing on relationships among them and comparing their aesthetics. May be repeated for maximum of 6 hours credit.

**ENGL 4373. Major African American Authors since the Harlem Renaissance. (3).** In-depth study of two or three authors since 1930, focusing on relationships among them and comparing their aesthetics. May be repeated for maximum of 6 hours credit.

**ENGL 4423. Modern British and American Poetry. (3).**

**ENGL 4424. Modern British and American Fiction. (3).**

**ENGL 4430. The Graphic Novel. (3).** Close study of the nature and cultural significance of the graphic novel genre, characterized by the interplay between verbal and visual.

**ENGL 4441. European Fiction. (3).** Movements and writers important to development of continental fiction from late 18th century to present.

**ENGL 4451. Studies in Women and Literature. (3).** Literature and criticism by and about women.

**ENGL 4452. Modern Drama. (3).** American, British, and European drama from Ibsen to 1950.

**ENGL 4453. Contemporary Drama. (3).** American, British, and European drama from 1950 to the present.

**ENGL 4461. The Bible as Literature. (3).**

**ENGL 4471. Art of Biography. (3).** Reading, discussion, and practice of the literary construction of lives, one's own and others; examines authors' artistic strategies, motives, audience, and perspectives based on gender and culture. **[W]**

**ENGL 4501. History of the English Language. (3).**

**ENGL 4511. Language and Literature. (3).** How linguistics can illuminate the analysis of literature, the nature of literary language, and the linguistic options open to a writer. **[W]**

**ENGL 4521. Language and Society. (3).** Place of language in society and how it creates and reflects social relationships; geographical and social dialects, male/female differences, and language of various subgroups within our culture; intensive examination of implications of language differences. **[I]**

**ENGL 4530. Practicum in ESL. (3-6).** Experience in observing and teaching, peer teaching, and work with an ESL specialist. May be repeated for a maximum of 6 hours credit. (S/U).

**ENGL 4531. Methods and Techniques in ESL. (3).** Methods and techniques of teaching English as a Second Language in various settings.

**ENGL 4532. Skills Approaches and Assessment for ESL. (3).** Approaches to evaluation and means of assessment of language skills, with special emphasis on English as a Second Language. **[C]**

**ENGL 4533-6533. Issues and Techniques in English as a Foreign Language. (3).** Skills, background, and approaches needed for teaching English outside the United States.

**ENGL 4540-4550. Special Topics in Language and Linguistics. (3).** Topics are varied and in online class listings.

**ENGL 4599. Forms of Creative Nonfiction. (3).** Creative nonfiction and the techniques appropriate to each.

**ENGL 4600. Creative Nonfiction Workshop. (3).** Nature of creative nonfiction, critical approaches to the genre; practical experience in writing and revising text. May be repeated for a maximum of 6 hours credit with permission of instructor. PREREQUISITE: ENGL 3607.

**ENGL 4601. Poetry Workshop. (3).** The nature of poetry, critical approaches to the poem, and practical experience in writing and revising text. May be repeated for maximum of 6 hours credit with permission of instructor. PREREQUISITE: ENGL 3606.

**ENGL 4602-6602. Advanced Composition (3).** Principles involved in writing clear expository prose; emphasis on application of these principles; analysis of readings and of student's writing. **[W]**

**ENGL 4603. Fiction Workshop. (3).** Nature of short story and longer forms of fiction, critical approaches to fiction, and practical experience in writing and revising text. May be repeated for maximum of 6 hours credit. PREREQUISITE: ENGL 3607 and permission of instructor..

**ENGL 4604. Forms of Poetry. (3).** A study of metrics, forms, and types of poetry in English with attention to the principal traditions and critical ideas associated with the writing of verse in English.

**ENGL 4605. Forms of Fiction. (3).** A study of how fiction works through analyzing the short story, the novella, and the novel with attention to technical developments.

**ENGL 4606-15. Topics In Advanced Technical Writing. (3).** Theories, contexts, and practices of writing in the world of technology; topics vary; extensive practice in writing, editing, and preparing technical publications.

**ENGL 4616. The Publishing Process. (3).** Steps in the publishing process from writing a manuscript to printing it, including the publishing of various genres throughout the world.

**ENGL 4617. Computers and Writing. (3).** Impact of computers on writing process in academic, personal, creative, and professional writing; extensive practice in using computer tools for invention, planning, drafting, revising, editing, and production. Students explore their own writing processes and effects of technology on those processes as they work through variety of individual and collaborative assignments. **[W]**

**ENGL 4630. Internship in Professional Writing. (3).** Experience in technical, scientific, legal, government, or business writing with a professional in the field. Dependent upon availability. PREREQUISITE: 3601 and 3602 and permission of instructor.

**ENGL 4711. The Author, the Text, the Reader, and the World. (3).** Methodological reflection upon theory and practice of reading linguistic, literary, and rhetorical models. PREREQUISITE: 15 hours of English. **[I]**

**ENGL 4900. Independent Study. (1-3).** A selected topic or problem in the field of literature, language, or writing. Topic must not duplicate existing University courses. May be repeated for maximum of 6 hours credit when the topic varies. PREREQUISITE: permission of instructor. (A-F, IP)

**ENGL 4996. Honors Thesis. (3). [W]**

## (ENGR) ENGINEERING

CHARLES W. BRAY, Ph.D., *Associate Dean*
*Room 201A, Engineering Science Building*

**ENGR 4001. Engineering Work Experience. (3).** Off-campus work experience working on selected projects in coordination with department chair or chair's designee in student's major department under direction of practicing engineer. Oral and written presentations may be required. May be repeated as many times as student chooses. PREREQUISITE: approval of the department chair and CO-OP director. (A-F, IP)

**NOTE:** Students participating in ENGR 4001 are considered to be full-time students for enrollment certification purposes.

## (EXSS) EXERCISE AND SPORT SCIENCE

### Department of Human Movement Sciences and Education

MICHAEL H. HAMRICK, Ed.D., *Chair*
*Room 106, Elma Neal Roane Fieldhouse*
*http://www.hmse.memphis.edu/*

**EXSS 1102. Personal Health. (3). (HLTH 1102).** Concepts of personal health including chronic and infectious diseases, sexually transmitted diseases, mental health, substance use and abuse, health consumerism, sexuality, aging, and death and dying.

**EXSS 3050. Advanced Life Support for Exercise Conditioning and Testing. (3).** Development of knowledge and skills related to anatomical and physiological changes that may result from exercise conditioning and testing; signs and symptoms of acute health related problems; first aid measures, CPR, use of an AED. PREREQUISITE: BIOL 2010/2011 and 2020/2021. **(F/Su).**

**EXSS 3306. School Health, Safety and First Aid. (3).** School health program involving health services, healthful school living, health screening, home and school safety; health content, skills and materials suitable for elementary education; first aid with CPR.

**EXSS 3307. Psychosocial Aspects of Sport. (3).** Designed to help students develop understanding of psychological aspects of participation in sport; emphasis on research and theoretical frameworks related to performance enhancement and enjoyment in sport.

**EXSS 3405. Anatomic Kinesiology. (3). (4403)** Anatomic systems as related to purposeful movement of the human body; structure and function of musculoskeletal system. PREREQUISITE: BIOL 2010/2011 and 2020/2021. **(F/Su).**

**EXSS 3450. Psychological Aspects of Exercise. (3). (4602).** Emphasis on the application of psychological principles in fostering motivation among individuals in exercise/physical activity settings. PREREQUISITE: BIOL 2010/2011and 2020/2021. [W] **(Sp/Su).**

**EXSS 3502. Prevention and Care of Athletic Injuries. (3).** Practical and theoretical aspects of treatment of athletic injuries in athletic training programs; supplies, training table, therapeutic equipment, and techniques in conditioning and bandaging. PREREQUISITE: HMSE 2102, or permission of instructor.

**EXSS 3505. Principles of Health Fitness Instruction. (3).** Principles of exercise; principles of writing exercise prescriptions based on case studies for apparently health and medically stable symptomatic populations; calculating energy expenditure for variety of activities; health related effects of physical fitness emphasizing the relationship between physical activity and chronic diseases. PREREQUISITE: BIOL 2010/2011 and 2020/2021. COREQUISITE: EXSS 3506. **(Sp/Su).**

**EXSS 3506. Principles of Health Fitness Instruction Practicum. (1) (4204).** Acquisition and practice of laboratory/clinical skills pertaining to methods for measuring body composition, muscle strength, muscle endurance, flexibility, aerobic endurance. Course requires a 30 hour supervised clinical experience in the Wellness Evaluation and Resource Unit. A uniform may be required for this laboratory experience. PREREQUISITE: BIOL 2010/2011 and 2020/2021. COREQUISITE: EXSS 3505. **(Sp/Su). (A-F, IP)**

**EXSS 3603. Exercise Physiology I. (3).** Anatomical and physiological bases for expressing, developing, and maintaining muscular endurance, strength, power, joint flexibility, body composition as well as various factors which may affect them. PREREQUISITE: BIOL 2010/2011 and 2020/2021. **(Sp/Su).**

**EXSS 3604. Teaching Exercise and Sport Science, K-Middle School. (2).** Skills, activities, and resource materials for teaching elements of movement, educational games, educational gymnastics, and physical fitness to youth. COREQUISITE: EXSS 3605.

**EXSS 3605. Clinical Experience in Teaching Exercise and Sport Science, K-Middle School. (1).** Observations and the teaching of mini-lessons in physical activity in an elementary school setting. COREQUISITE: EXSS 3604. S/U.

**EXSS 3700. Exercise Physiology for Physical Education. (3).** Physiological effects of muscular activity; appropriate training for maximizing physical performance, lifetime fitness and wellness. PREREQUISITE: BIOL 2010/2011 and 2020/2021. **(Sp/Su).**

**EXSS 3703. Exercise Physiology II. (3).** Exercise performance including energy metabolism and regulation, cardiovascular physiology, environmental physiology; principles of physiological and biochemical assessment; interpretation of physiological and biochemical data; development of appropriate training programs to maximize performance efficiency. PREREQUISITE: BIOL 2010/2011 and 2020/2021. **(Sp/Su).**

**EXSS 3803. Motor Learning. (3).** Theory and research concerning the behavioral and neurological bases for understanding the processes involved in motor skill learning and performance. PREREQUISITE: BIOL 2010/2011 and 2020/2021. **(F/Su).**

**EXSS 3853. Motor Behavior. (3).** Basic theories and principles of motor learning and performance; developmental aspects of human motor behavior across the life span. **(F).**

**EXSS 4000-6000. Exercise Testing Techniques and Interpretation Laboratory. (4).** Acquisition and practice of laboratory/clinical skills pertaining to measurement techniques, tools and interpretation of physical performance and fitness; theoretical and functional techniques of graded exercise testing for functional and/or diagnostic assessment. Requires 40 hours supervised clinical experience in the Wellness Evaluation Resource Unit. Purchase of approved uniform may be required. **(F).**

**EXSS 4003. Health Promotion Program Development and Administration. (3).** Basic skills and principles of developing, implementing, evaluating, managing health promotion programs in a variety of settings including community, business, and corporate sectors. PREREQUISITE: BIOL 2010/2011, 2020/2021; EXSS 3050, 3405, 3450, 3505, 3506, 3603, 3703, 3803, 4603. **(F/Su).**

**EXSS 4010-6010. Ergogenic Aids and Nutrition in Fitness and Sport. (3).** Role of nutrition in optimizing performance and training adaptations; macro and micro nutrient intake, proper timing and amount of intake; analysis of validity of proposed ergogenic performance and/or structural adaptation. PREREQUISITE: BIOL 2010/2011 and 2020/2021; EXSS 3405, 3410, 3415, 3420, 3421. **(F/Su).**

**EXSS 4015. Exercise Programming for Special Populations. (3). (3310).** Principles of cardiovascular medicine related to therapeutic management of various disease states through exercise; medical consequences of various disease states; developing comprehensive rehabilitative programs to decrease physical disability. Variable hours of supervised laboratory/field experience may be required. PREREQUISITE: BIOL 2010/2011, 2020/2021; EXSS 3050, 3405, 3450, 3505, 3506, 3603, 3703, 3803, 4603. **(F/Su).**

**EXSS 4406-6406. Exercise Testing and ECG Interpretations. (3).** Introduction to the methods of conducting ECG and cardiopulmonary exercise testing for asymptomatic and symptomatic populations; ACSM principles of exercise testing as well as methods of ECG interpretation will be covered. Variable hours of supervised laboratory/field experience may be required. Purchase of an approved uniform may be required for this course.

**EXSS 4502. Advanced Prevention and Care of Athletic Injuries. (3).** Advanced practical and theoretical aspects of treatment of athletic related injuries in athletic training programs; supplies, management, organization, injury recognition, evaluation and assessment, therapeutic modalities, bandaging, and techniques in conditioning and rehabilitation. PREREQUISITE: EXSS 3502.

**EXSS 4603-6603. Advanced Methods of Strength Conditioning. (3).** An advanced study of training principles for strength and conditioning programs and their underlying physiological bases. PREREQUISITE: BIOL 2010/2011, 2020/2021; EXSS 3050, 3405, or permission of instructor. **(Sp/Su).**

**EXSS 4605. Internship in Exercise and Sport Science. (3-9).** Culminating experience allowing students the opportunity to demonstrate knowledge and skills in an appropriate professional setting. PREREQUISITE: completion of all course work in major and concentration. COREQUISITE: HMSE 4999. S/U.

**EXSS 4705-11-6705-11. Special Topics Workshop in Exercise and Sport Science. (3).** Selected phases of exercise and sport science through group study. In-depth study of area of interest and need for exercise and sport scientists. Topics are varied and in online class listings. May be repeated with a change in topic.

**EXSS 4902-11-6902-11. Special Topics in Exercise and Sport Science. (1-3).** Current topics in exercise and sport science. May be repeated with change in topic and content. Topics are varied and in online class listings.

## (FIR) FINANCE, INSURANCE AND REAL ESTATE

THOMAS McINISH, Ph.D., *Interim Chair*

*Room 402, Fogelman College of Business and Economics Administration Building*

**Students must have junior standing and have met specific course prerequisites with a minimum grade of "C" (2.0) to be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of "C" (2.0) in each; (2) minimum of 2.25 GPA (2.5 GPA for Accounting majors) in all required lower division business courses and MATH 1830, and (3) 55 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements).**

**A surcharge of $10.00 per credit hour for 3000 and 4000 level courses and $20.00 per credit hour for 6000-9000 level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).**

**FIR 2220. Personal Financial Management. (3).** Non-technical dealing with broad areas of budgeting, insurance, borrowing and credit purchases, home ownership, investment, taxes, and family financial planning. NOTE: if taken after student has received credit for FIR 3710 or 3810, credit will not count for B.B.A. degree.

**FIR 3011. Business Law. (3).** Elements of law and legal principles encountered in business; emphasis on basic law of contracts, sales and secured transactions, negotiable instruments, real and personal property, agency, forms of business organization, suretyship, insurance contracts and torts.

**FIR 3130. The Legal, Social, and Political Environment of Business. (3).** Emphasis on legal, social, and political environment in which business and its executives exist; legal, social, and political forces that affect business operations; lectures and case discussions.

**FIR 3220. Personal Investing. (3).** To assist individual investors of all backgrounds in development and monitoring of an investment portfolio by explaining possible investment alternatives including terminology and analysis techniques to fulfill future financial goals. NOTE: open to all University students. NOTE: this course may not be counted toward fulfilling the requirements for the Finance major.

**FIR 3310. Real Estate Principles. (3).** Basic terminology, principles and issues; market analysis, real estate law, instruments, legal descriptions, appraisal, investment, finance, brokerage, property management. Designed for non-real estate majors as well as a foundation for further study.

**FIR 3410. Business Finance. (3).** Fundamentals of business finance; time value of money, capital budgeting techniques, securities valuation, and cost of capital. PREREQUISITE: ACCT 2020, ECON 2120, ISDS 2710.

**FIR 3710. Investments. (3).** Principles of investment in stocks and bonds; fundamental, economic, and technical analysis; measurable and unmeasurable aspects of risk; portfolio management; psychological aspects of the market. PREREQUISITE: FIR 3410.

**FIR 3720. Financial Markets. (3).** Survey of important funds markets, institutions and characteristics peculiar to them; sources of supply of and demand for funds in each market, and complex interrelations among several markets analyzed. PREREQUISITE: FIR 3410.

**FIR 3770. Derivative Markets. (3).** Use of futures, options, forwards, and swaps, with a primary focus on their practical application in financial markets. PREREQUISITE: FIR 3710.

**FIR 3810. Principles of Risk and Insurance. (3).** Nature and handling of risk in personal and business situations; emphasis on property, liability and life exposures to loss. Designed for non-insurance major as well as a basis for advanced study.

**FIR 4011-6011. Estate Planning and Law of Taxation. (3).** Survey of law of taxation as applied to transmission of property by gift or death and its impact upon accumulations of wealth; estate planning from individual viewpoint designed to create, maintain, and distribute maximum estate possible.

**FIR 4110-19. Special Topics. (3).** Current topics in one of following areas: Finance, Insurance, Real Estate, or Business Law. Topics are varied and in online class listings. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.

**FIR 4310-6310. Real Estate Law. (3).** Law and legal instruments as applied to real estate; needs of property owners and those engaged in real estate business.

**FIR 4320. Real Estate Finance. (3).** Terminology, legislation, principles, and analytical techniques pertaining to financing of real estate; perspective of lender, residential borrower, and income property borrower. PREREQUISITE: FIR 3410.

**FIR 4340-6340. Real Estate Appraisal. (3).** Basic terminology, principles, procedures, and issues; nature of value, principles of value, appraisal process, market approach, cost approach, capitalization of income approach, gross rent multiplier approach, and appraisal reports.

**FIR 4350. Real Estate Investment Principles. (3).** Principles and practices reviewed and evaluated; investment strategy, ownership forms, tax implications, cash flow analysis, measures of return, risk management, and property selection.

**FIR 4440. Managerial Finance. (3).** Analytical approaches to firm's financial decisions; current asset management, capital budgeting, cost of capital, capital structure determination, and dividend policy. PREREQUISITE: FIR 3410.

**FIR 4550. International Finance. (3).** Financing international trade and investments; foreign exchange markets and exchange rates; balance of payments; current developments in international financial cooperation. PREREQUISITE: FIR 3410.

**FIR 4610-6610. Cases In Managerial Finance. (3).** Application of tools and principles introduced in previous courses to develop up-to-date problem solving techniques; cases approached from standpoint of top level management and utilize both quantitative and qualitative analysis. PREREQUISITE: FIR 4440.

**FIR 4710. Commercial Banking. (3).** Study of bank management and bank regulation; examination of conditions that lead to bank regulation and conditions that caused deregulation; exploration of current theories of profitable bank operations. PREREQUISITE: FIR 3410.

**FIR 4720-6720. Management of Financial Institutions. (3).** Exposure to financial policies and decision-making that are peculiar to financial institutions in United States; management of institutions consistent with adequate standards of liquidity and solvency. PREREQUISITE: FIR 3410, 3720.

**FIR 4770. Security Analysis and Portfolio Management. (3).** Development of techniques for finding actual worth of securities, primarily stocks and bonds; selection, timing, diversification, and other aspects of supervising investment funds. PREREQUISITE: FIR 3710.

**FIR 4810-6810. Property and Liability Insurance I. (3).** Forms and functions of fire, marine, automobile, general liability and other types of property and liability insurance; emphasis on business and industrial applications.

**FIR 4820-6820. Life and Health Insurance. (3).** Functions of life and health insurance; emphasis on economic security needs, human behavior and the problems related to death and dying; individual life, health and annuity contracts and social insurance; concepts in risk selections and regulation.

**FIR 4840-6840. Multiple Line Insurance Company Operations. (3).** Company and industry functions other than contracts; including rating, rate-making, reserves, auditing, underwriting, reinsurance, claims, production engineering, and governmental supervision.

**FIR 4860. Employee Benefit Programs. (3).** Life, health and pension benefit programs from the viewpoint of the benefit planner; reasons for providing such programs, alternate methods for providing benefits, and broadly designing specifications for benefits.

**FIR 4870. Risk Management. (3).** Problems of risk manager in small and large firms, methods of handling risk that serve as alternatives to obtaining insurance; brief survey of insurance as standard for comparisons.

**FIR 4880-6880. Risk Management Finance. (3).** Emphasis on integrating financial theory into practice of risk management for the firm; use of quantitative tools to carry out risk management process by developing spreadsheets to measure expected loss, determine appropriate risk handling method, and analyze risk financing arrangements. PREREQUISITE: FIR 3410.

**FIR 4910. Problems in Finance, Insurance, or Real Estate. (1-3).** Student will carry on approved research projects in the major area under supervision of staff members. PREREQUISITE: senior standing and permission of department chair. (A-F, IP)

**FIR 4911. Internship in Finance, Insurance, and Real Estate. (1-6).** Internship in business organization to gain on-the-job experience in real-life environment. Project to be approved and supervised by department faculty. Credit allowed only after acceptance of report. PREREQUISITE: successfully completed at least 15 hours of upper division business courses with a 2.75 GPA in these courses. (A-F, IP)

**FIR 4996. Senior Honors Thesis In Finance, Insurance, and Real Estate. (3).** Independent research open only to those students enrolled in the honors program. Thesis supervised by department faculty member. PREREQUISITE: senior standing and permission of the Director of the College Honors Program. (A-F, IP)

## (FREN) FRENCH

### Department of Foreign Languages and Literatures

RALPH ALBANESE, Ph.D., *Chair*
*Room 375, Dunn Hall*

*http://fl.memphis.edu*

**FREN 0701. French for Reading Knowledge I. (3).** Introduction to reading French; intensive drill in recognizing and interpreting grammatical structures, especially those peculiar to scholarly written language; emphasis on vocabulary building and on determining the meaning of words not previously encountered; reading of texts in French at sight or after preparation. No previous knowledge of French required. Does not fulfill any part of undergraduate language requirement and cannot be applied toward major. (S/U).

**FREN 0702. French for Reading Knowledge II. (3).** Further work in recognizing and interpreting grammatical structures; reading of specialized scholarly texts. Does not fulfill any part of undergraduate language requirement and cannot be applied toward major. (S/U).

**FREN 1010. Elementary French I. (3). (1101).** Basic skills fundamental to language proficiency and culture. ♦

**FREN 1020. Elementary French II. (3). (1102).** Further development of basic skills fundamental to language proficiency and culture. PREREQUISITE: FREN 1010, or equivalent. ♦

**FREN 2010. Intermediate French I. (3). (2201).** Comprehensive review of French grammar, exercises in writing, and readings in French literature and culture. PREREQUISITE: FREN 1020, or equivalent. ♦

**FREN 2020. Intermediate French II. (3). (2202).** More advanced readings. PREREQUISITE: FREN 2010, or equivalent. ♦

**FREN 3301. Conversation and Composition. (3).** PREREQUISITE: FREN 2020, or equivalent.

**FREN 3302. Conversation and Composition. (3).** PREREQUISITE: FREN 3301, or permission of instructor.

**FREN 3401. French Civilization. (3).** Culture of France as reflected in its history, social institutions, art, and music. Recommended for Foreign Language, liberal arts, and International Business majors. PREREQUISITE: FREN 3301, or permission of instructor.

**FREN 3411. Introduction to French Literature. (3).** Selections from origins to present time; emphasis on textual analysis. PREREQUISITE: FREN 3301.

**FREN 3791. French for Commerce I. (3).** Introduction to French business terminology and forms of correspondence with regular readings of business, commercial and technical publications. PREREQUISITE: FREN 3301 recommended.

**FREN 3792. French for Commerce II. (3).** Continuation of French 3791. PREREQUISITE: FREN 3791, or equivalent.

**FREN 4301-6301. French Phonetics. (3).** Theory and practice of French sounds, especially recommended for teachers of French. PREREQUISITE: three years of college French, or permission of instructor.

**FREN 4302-6302. Advanced Grammar. (3).** Practical advanced grammar course concerned with grammatical, syntactical, and lexical usage of contemporary French.

**FREN 4412-6412. Seventeenth and Eighteenth Century French Literature. (3).** Classical theatre and critical theories; essay, nouvelle, and conte in 18th century. PREREQUISITE: FREN 3301. RECOMMENDED: FREN 3411.

**FREN 4413-6413. Nineteenth Century French Literature. (3).** Survey of literary movements and major authors with readings in all major genres. PREREQUISITE: FREN 3301. RECOMMENDED: FREN 3411.

**FREN 4414-6414. Twentieth Century French Literature. (3).** Survey of literary movements and major authors with readings in the novel, poetry and theater. PREREQUISITE: FREN 3301. RECOMMENDED: FREN 3411.

**FREN 4780. Individual Studies in French. (1-3).** Directed individual study in selected areas of French chosen in consultation with instructor. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor. (A-F, IP)

**FREN 4791-99. Special Topics in French Literature, Language, or Civilization. (3).** Topics are varied and in online class listings. May be repeated for a maximum of 6 hours credit. PREREQUISITE: FREN 3301, or permission of instructor. RECOMMENDED: FREN 3411.

## (GEOG) GEOGRAPHY

### Department of Earth Sciences

MERVIN J. BARTHOLOMEW, Ph.D., *Chair*
*Room 107, Johnson Hall*

*http://cas.memphis.edu/geography/gdept/index.html*

***Additional fees are charged for some Geography lecture and laboratory courses.* See the online class listings or the Expenses section of the Bulletin.**

**GEOG 1003. Global Environmental Change. (3) (1103).** Examination of global environmental change from interdisciplinary approach; changes in the atmosphere, lithosphere, and hydrosphere, especially those that seem to be related to human actions; greenhouse-gas induced global warming, ozone depletion as related to CFCs released by people, effect of accelerated deforestation and reforestation on biosphere; relation between human activities and soil erosion and depletion. PREREQUISITE: one introductory natural science course, or permission of instructor.

**GEOG 1010. Introduction to Environmental and Earth Science: Weather and Climate. (3). (1001).** Atmospheric processes and geographic distribution of radiation, moisture, pressure, and circulation interacting to create weather systems and storms; oceanic influences, earth-sun relationships, global climate patterns; human interaction with atmosphere. PREREQUISITE: two years of high school algebra. **[G]** ♦

**GEOG 1011. Introduction to Environmental and Earth Science: Weather and Climate Laboratory. (1).** Laboratory exercises, observations, and experiments designed to apply scientific methods to lecture; observations of atmospheric phenomena and use instruments, both in lab and in field, in order to better understand what is involved in experimental problems. *Two laboratory hours per week.* PREREQUISITE or COREQUISITE: GEOG 1010. **[G]** ♦

**GEOG 1020. Introduction to Environmental and Earth Science: Landforms. (3). (1002).** Agents and processes of landform develop-

ment and geographic relationships of landscapes including volcanic, fluvial, glacial, and coastal environments; soil development and vegetation associations; environmental hazards to humans; maps and aerial photo interpretation as sources of environmental information. PREREQUISITE: two years of high school algebra. [G] ♦

**GEOG 1021. Introduction to Environmental and Earth Science: Landforms Laboratory. (1) (1022).** Laboratory exercises, observations, and experiments designed to apply scientific methods to lecture subjects; topographic maps and aerial photographs are major information sources for interpretation and analysis; stereoscopes utilized for three-dimensional viewing; stream tables, soil profiles, and landscape models used to illustrate physical processes interacting to modify earth's surface. *Two laboratory hours per week.* PREREQUISITE or COREQUISITE: GEOG 1020. [G] ♦

**GEOG 1301. Survey of World Regions. (3).** Survey of economic, cultural and physical traits characteristic of developing and industrialized nations. [G]

**GEOG 1401. Introduction to Cultural Geography. (3).** Geographical aspects of human behavior; distributional patterns and interactions of such cultural characteristics as language, religion, politics, and economics. [G]

**GEOG 3200. Peoples and Cultures of the World. (Same as ANTH 3200). (3).** Major ethnographic areas and selected cultures of world.

**GEOG 3221. Principles of Conservation. (3).** Development of conservation ethic and wilderness concepts; survey of environmental problems, land use, and energy and resource utilization; soil erosion and crop productivity relationships.

**GEOG 3401. Historical Geography of the U.S. (3).** Evolution of the cultural landscapes of the United States with emphasis on the interaction of environment and people in the development of this nation. [G] ♦

**GEOG 3430. Economic Geography. (3).** Spatial characteristics and distribution of economic activities.

**GEOG 3451. Introduction to Urban Planning. (3).** Introduction to regional and urban planning emphasizing spatial relationships of physical, economic, and cultural phenomena necessary in planning process.

**GEOG 3501. Map Reading. (3).** Comprehensive study of maps as geographic tools that enable user to gain knowledge of earth through map reading and map interpretation and to make intelligent use of such map information.

**GEOG 4120-6120. Geomorphometry. (3).** Quantitative analysis of morphology of landforms; data acquisition from field work, topographic maps, digital terrain models; GPS and GIS used to derive, store, manipulate, analyze morphometric data. Course may be repeated. PREREQUISITE: GEOG 1020, 1021, or GEOL 1040.

**GEOG 4122-6122. Environmental and Earth Science: The Soil. (3).** Processes and dynamics of soil profile development; major models of soil development examined and applied to soil genesis in Tennessee; application of soil techniques to archaeology, planning, earth sciences, and soil conservation and erosion problems; emphasis on field and laboratory techniques with field work in soil mapping and soil taxonomy. *Two lecture hours, two laboratory hours per week.*

**GEOG 4201-6201. Urbanization and Environment. (3).** Ways man has changed natural environment by urbanization and how physical features and processes influence development and function of cities.

**GEOG 4211-6211. Climatology. (3).** Climatic elements and methods of data analysis; applications of climatology in agriculture, health, economics, and architecture. PREREQUISITE: GEOG 1010/1011 and PHYS 2010/2011.

**GEOG 4215-6215. Physical Climatology. (3).** Components of earth's energy balance, emphasis on solar radiation, heat transfer, and evapotranspiration. PREREQUISITE: GEOG 1010/1011 and PHYS 2010/2011.

**GEOG 4231-6231. Water Resources. (3).** Hydrologic processes and their application to needs of cities, industry, agriculture, and recreation.

**GEOG 4241-6241. Biogeography. (3).** Principles underlying spatial distribution of plants, including physical, biotic, and historical controls; vegetation dynamics; survey of patterns and processes of North American vegetation.

**GEOG 4251-6251. Environmental Issues and Natural Hazards. (3).** Interrelations between human beings and natural hazards; importance of policy decisions; planet-wide climatic changes, potential changes in earth-sun relations, inadequate food production, local disasters, and nuclear contamination.

**GEOG 4271-6271. Park Resource Protection and Visitor Management I. (4).** Concepts of geography and psychology required for resource protection and visitor management positions as park rangers in federal and state parks. Classroom instruction, readings, and applied practical exercises included. PREREQUISITE: permission of instructor.

**GEOG 4272-6272. Park Resource Protection and Visitor Management II. (4).** Advanced content and skills involved in protecting natural resources and managing park visitor behavior in recreational areas; knowledge and skill-building in natural resource law, enforcement skills, and advanced interpersonal development. PREREQUISITE: GEOG 4271 and permission of instructor.

**GEOG 4304-6304. Geography of Europe. (3).** Geographic analysis of physical, cultural and economic characteristics of Europe.

**GEOG 4306-6306. Geography of Asia. (3).** Significance of regional differences in Japan, China, and India, and brief survey of remaining areas.

**GEOG 4313-6313. Geography of the United States and Canada. (3).** Physical, cultural, and economic characteristics of United States and Canada.

**GEOG 4316-6316. Geography of the South. (3).** Selected regions in South; emphasis on changes and trends in cultural-physical complex.

**GEOG 4318-6318. Geography of American National Parks. (3).** An examination of individual types of parks with regard to location, physical characteristics and use; the history and mission of the National Park Service with regard to management of the national parks past and present; implications for future public land management strategies.

**GEOG 4324-6324. Geography of Middle America. (3).** Peoples and places of Mexico, Central America, and the Caribbean; history of Maya and Aztec culture, cultural ecology and traditional land use, contemporary development issues, and the region's global situation.

**GEOG 4325-6325. Geography of South America. (3).** Lands and peoples of the diverse regions of South America, folk populations, Amazonia, Andean issues; contemporary economics and resources in a developing world region.

**GEOG 4431-6431. Urban Geography. (3).** Allocation of land for urban uses; adjustments and adaptations to existing physical phenomena; patterns, functions, and forms of specific urban land areas; and some continuous problems of urban development and growth.

**GEOG 4443-6443. Transportation Planning. (3).** Planning for various transportation modes and networks and impact they have on land use and contemporary development problems.

**GEOG 4502-6502. Computer Cartography. (3).** Use of computer mapping programs as effective techniques for visual presentation of wide variety of data. *Two lecture hours, two laboratory hours per week.*

**GEOG 4510-6510. Aerial Photo Interpretation. (3). (Same as GEOL 4510).** Elements and steps involved in interpreting, measuring, and mapping of images appearing on aerial photographs. *Two lecture hours, two laboratory hours per week.*

**GEOG 4511-6511. Remote Sensing of the Environment. (3). (Same as GEOL 4512).** Survey of theory and application, use of color, infrared, thermal, and radar images generated from satellites for geographic, environmental, and planning purposes. *Two lecture hours, two laboratory hours per week.* PREREQUISITE: GEOG 4510, or permission of instructor.

**GEOG 4515-6515. Geographic Information Science. (3).** Basic concepts, components, functions of Geographic Information Science using ARC/INFO GIS; concepts and structure of spatial data, databases planning and design, data quality control, automating spatial data, attribute data management, spatial manipulation, spatial analysis techniques. PREREQUISITE: GEOG 1010 or 1020 or 1301 or 3430 or 4201, or permission of instructor.

**GEOG 4521-6521. Quantitative Methods. (3).** Introduction to quantitative methods in spatial analysis. **[C]**

**GEOG 4522. GIS for Business and Social Sciences. (3).** Introduction to the application of interactive computer mapping and geographic information systems software in business and social science decision making.

**GEOG 4525-6525. Analytical Geographic Information Science. (3).** Advanced concepts, methods, principles of GIS and practical experience in analytical use of spatial information; GIS data structure, error and uncertainty in GIS; management and measurement of spatial data, single and multiple-layer operations, spatial correlation analysis, point pattern analysis using GIS, INFO, and AML programming, geographical analysis and applications in resource and environment management. PREREQUISITE: GEOG 4515 and 4502, or permission of instructor.

**GEOG 4531-6531. Field Methods. (3).** Basic methods of geographic analysis used in classifying, analyzing and reporting field-generated data including field mapping, sampling procedures, questionnaires and archival and public document research. *One and one-half lecture hours, three laboratory hours per week.*

**GEOG 4541. Field Studies. (1-6).** Faculty-conducted field trip emphasizing study of geographic phenomena. Location will vary. Topics may include physical landscapes, land-use patterns, cross-cultural analysis, micro and regional economics, or other geographical processes. Credit hours based on length of time in field. Requires field journal and report to receive credit. May be repeated with change in content for a maximum of 6 hours credit. PREREQUISITE: permission of instructor and completion of special registration. (A-F, IP)

**GEOG 4551. Urban Planning Studio. (3).** Application of planning process to urban problems and preparation of plans for the urban area. PREREQUISITE: GEOG 3451, or permission of instructor.

**GEOG 4610-19-6610-19. Special Topics In Geography. (1-3).** Topics are varied and in online class listings.

**GEOG 4621. Independent Study. (1-3).** Student, under faculty supervision, studies in-depth particular geographic topic. May be repeated with change in content for a maximum of 3 hours credit. PREREQUISITE: permission of instructor. (A-F, IP)

**GEOG 4700-6700. Geography Internship. (1-9).** Experience working with agency in which geographic knowledge can be utilized. May be repeated for a maximum of 9 hours credit. Credit allowed only after acceptance of report. PREREQUISITE: permission of instructor and department chair. (S/U).

**GEOG 4801. Geographical Thought and Application. (3).** Major concepts in environmental/earth sciences, human/cultural, and economic/urban geography. Proseminar format requires review of readings with oral and written presentations. Focus on synthesis and application of geographic concepts to contemporary research themes. PREREQUISITE: 23 semester hours in Geography to include: GEOG 1010, 1020, 1011, 1021, 1301 or any 43__ course; GEOG 1401 or 3430, 3514 and two additional upper division courses selected from two of the following areas: human/economic, environmental/earth, or the techniques. Registration by permit only. **[W, I]**

# (GEOL) GEOLOGY

## Department of Earth Sciences

MERVIN J. BARTHOLOMEW, Ph.D., *Chair*
*Room 402, J. M. Smith Hall*
*http://cas.memphis.edu/geology/*

***Additional fees are charged for some Geology lecture and laboratory courses.*** **See the online class listings or the Expenses section of the Bulletin.**

**GEOL 1040. Physical Geology. (4). (1101).** Introduction to processes that form the rocks in the earth's crust; the earth's internal forces that make mountains and volcanoes; special emphasis on topics that impact the Mid-South, such as earthquakes. *Three lecture hours, two laboratory hours per week.* **[G]** ♦

**GEOL 1050. Historical Geology. (4). (1102).** Overview of history of earth and its life as interpreted from rock and fossil record; origins of continents, mountain ranges, ocean basins and natural regions of U.S. *Three lecture hours, two laboratory hours per week.* PREREQUISITE: GEOL 1040. **[G]** ♦

**GEOL 1103. Environmental Geology. (4).** Applications of Physical Geology to understanding, evaluating and solving problems created by natural hazards and those created by humans; study in management, utilization and preservation of our natural regions, finite space and resources. *Three lecture hours, two laboratory hours per week.* PREREQUISITE: GEOL 1040. **[G]** ♦

**GEOL 3211. Invertebrate Paleontology. (4).** Fossil invertebrate animals and their importance in interpretation of ancient environments, evolution, and geologic time. *Three lecture hours, two laboratory hours per week.* PREREQUISITE: GEOL 1040, or permission of instructor. **[W]**

**GEOL 3311. Mineralogy. (4).** Structural and chemical crystallography of minerals; classification and identification of minerals. *Two lecture hours, four laboratory hours per week.* PREREQUISITE: GEOL 1040. COREQUISITE: CHEM 1110, 1111.

**GEOL 3312. Introduction to Petrology. (4).** Classification, identification and genesis of igneous and metamorphic rocks in hand specimens; optical theory of light transmission through minerals; identification of translucent minerals in oil immersion with the petrographic microscope. *Two lecture hours, four laboratory hours per week.* PREREQUISITE: GEOL 3311.

**GEOL 3512. Structural Geology. (4).** Structures of the crust; geometry of folds and faults, rock deformation, criteria for recognizing structures, solution of geometrical problems. *Three lecture hours, two laboratory hours per week.* PREREQUISITE: GEOL 1040, MATH 1910, or permission of instructor. **[C]**

**GEOL 3712. Sedimentology and Stratigraphy. (4).** Origin and classification of sedimentary rocks and mutual relationship of sedimentary rock bodies both geographically and through geologic time. Lecture emphasizes comparison of modern depositional systems with their ancient counterparts. Laboratory emphasizes hand specimen analysis and preparation of geologic maps. *Three lecture hours, two laboratory hours per week.* PREREQUISITE: GEOL 1050 or 1103.

**GEOL 3802. Introduction to Oceanography. (3).** Origin, chemistry, water circulation, shoreline and deep water characteristics of oceans; its role in evolution and history of earth; marine life and its ecology.

**GEOL 4010-19-6010-19. Special Topics In Geological Sciences. (3).** Topics are varied and in online class listings.

**GEOL 4202-6202. Geomorphology. (4).** Description, origin and interpretation of landforms and their relationships to underlying structure and geologic history; processes acting on earth's surface, including active tectonics; weather; mass-wasting; climate change; and fluvial, shoreline, and glacial processes. *Three lecture hours, two laboratory hours per week.* PREREQUISITE: GEOL 1103 or GEOG 1020/1021.

**GEOL 4211-6211. Physical Hydrogeology. (4).** Movement, storage and development of groundwater; groundwater in the hydrologic cycle; aquifer characteristics and tests. *Three lecture hours, two laboratory hours per week.* PREREQUISITE: GEOL 1103 and one semester of calculus.

**GEOL 4332-6332. Introduction to Geochemistry. (3).** Geological and chemical processes that govern or control migration and distribution of elements and atomic species of earth in space and time. *Three lecture hours per week.* PREREQUISITE: GEOL 3312.

**GEOL 4341-6341. Aqueous Geochemistry. (3).** Physical chemistry of aqueous solutions as applied to geochemical processes on earth's surface. PREREQUISITE: CHEM 1120.

**GEOL 4351-6351. Advanced Structural Geology, (3).** Analysis of crustal structure; stress in rocks, mechanical interpretation of crustal structures. PREREQUISITE: GEOL 3512, MATH 1910.

**GEOL 4510-6510. Aerial Photo Interpretation. (3). (Same as GEOG 4510).** Elements and steps involved in interpreting, measuring and mapping images appearing on aerial photographs. *Two lecture hours, two laboratory hours per week.* PREREQUISITE: permission of instructor.

**GEOL 4512-6512. Remote Sensing of the Environment. (3). (Same as GEOG 4511).** Survey of theory and application; use of color, infrared, thermal and radar images generated from satellites for geographic, geologic, environmental and planning purposes. *Two lecture hours, two laboratory hours per week.* PREREQUISITE: GEOL 4510, or permission of instructor.

**GEOL 4622. Geology Field Camp. (6).** Preparation of structural and lithologic maps in prescribed geologic areas using topographic maps and aerial photographs. Instruments used are the alidade and the Brunton compass. Offered in summer school only. PREREQUISITE: GEOL 3312, 3512, and 3712. **[I]** (A-F, IP)

**GEOL 4701-6701. Spring Field Trip. (1-2).** Conducted field trips during spring vacation. About 30 hours of field work follow 2-4 hours of lectures. Open to nonmajors. Among areas which may be included are Ouachita-Arbuckle-Wichita Mountains of Oklahoma; Ouachita, Ozark dome and adjacent mineral districts; central and southern Appalachians; Gulf Coastal Plain; Death Valley, CA; and Grand Canyon, AZ. Check Schedule of Classes for specific location. May be repeated for a maximum of 8 hours credit. Dates, hours and credits to be arranged. PREREQUISITE: permission of instructor. (A-F, IP)

**GEOL 4721. Investigations In Geology. (1-3).** Individual or group work on topics of current interest. May be repeated for maximum of 6 hours credit. PREREQUISITE: permission of instructor. (A-F, IP)

**GEOL 4731. Senior Thesis. (1-3).** Original study on subject of geological significance to be carried on independently by student with faculty supervision. PREREQUISITE: senior standing in Geology. (A-F, IP)

## (GEOP) GEOPHYSICS

### Department of Earth Sciences

MERVIN J. BARTHOLOMEW, Ph.D., *Chair*
*Room 402, J. M. Smith Hall*

**GEOP 4101-6101. Introduction to Geophysics. (3).** Fundamental topics: earth's ages and their thermal state, main gravity and magnetic fields; dynamic models of earth's interior, comparison of terrestrial planets. PREREQUISITE: PHYS 2010, MATH 1910.

**GEOP 4201-6201. Applied Geophysics. (4).** Geophysic prospecting methods; seismic reflection and seismic refraction techniques, and electrical, magnetic, and gravity field measurements with emphasis on fundamental principles governing acquisition and interpretation of geophysical data. *Three lecture hours, two laboratory hours per week.* PREREQUISITE: permission of instructor.

**GEOP 4401-6401. Introduction to Seismology. (3).** Wave propagation in the earth; elasticity, elastic wave equation, vibration and waves, body and surface elastic waves seismic rays reflection and refraction of seismic waves, and the earthquake source. *Two lecture hours, two laboratory hours per week.* PREREQUISITE: MATH 4391 or permission of instructor.

**GEOP 4721. Seismogram Reading. (1).** Introduction to seismogram interpretation of recent earthquakes recorded by the instruments of CERI and the Global Digital Seismic Network. PREREQUISITE: permission of instructor. (S/U).

**GEOP 4722. Investigations In Geophysics. (1-3).** Individual or group work on topics of current interest in the broad field of geophysics. May be repeated for a maximum of 6 hours. PREREQUISITE: permission of instructor. (A-F, IP)

**GEOP 4931. Senior Thesis. (1-3).** Original study on subject of geophysical significance, to be carried on independently by student with faculty supervision. PREREQUISITE: senior standing. (A-F, IP)

## (GERM) GERMAN

### Department of Foreign Languages and Literatures

RALPH ALBANESE, Ph.D., *Chair*
*Room 375, Dunn Hall*
*http://fl.memphis.edu*

**GERM 0701. German for Reading Knowledge I. (3).** Introduction to reading of German. Intensive drill in recognizing and interpreting grammatical structures, especially those peculiar to scholarly written language; emphasis on vocabulary building and on determining meaning of words not previously encountered; reading of texts in German at sight or after preparation. No previous knowledge of German required. Does not fulfill any part of undergraduate language requirement and cannot be applied toward major. (S/U).

**GERM 1010. Elementary German I. (3). (1101).** Basic skills fundamental to language proficiency and culture. ♦

**GERM 1020. Elementary German II. (3). (1102).** Further development of basic skills fundamental to language proficiency and culture. PREREQUISITE: GERM 1010, or equivalent. ♦

**GERM 2010. Intermediate German I. (3). (2201).** Continued development of listening, speaking, reading, and writing skills. PREREQUISITE: GERM 1020, or equivalent. ♦

**GERM 2020. Intermediate German II. (3). (2202).** Expansion of German skills, with more extensive listening comprehension practice and readings. PREREQUISITE: GERM 2010, or equivalent. ♦

**GERM 2021. Intermediate German (Business Emphasis). (3). (2204).** Alternative to GERM 2020, with emphasis on business language. PREREQUISITE: GERM 2010, or equivalent.

**GERM 3301. Conversation and Composition. (3).** PREREQUISITE: GERM 2020, 2021, or equivalent.

**GERM 3302. Conversation and Composition. (3).** PREREQUISITE: GERM 2020, 2021, or equivalent.

**GERM 3411. Introduction to German Literature and Culture. (3).** From beginning to late eighteenth century. PREREQUISITE: GERM 2020, 2021, or equivalent.

**GERM 3412. Introduction to German Literature and Culture II. (3).** From late eighteenth century to modern period. PREREQUISITE: GERM 2020, 2021, or equivalent.

**GERM 3791. German for Commerce I. (3).** German business terminology and forms of correspondence; regular readings of business, commercial and technical publications. PREREQUISITE: GERM 2020, 2204, or equivalent.

**GERM 3792. German for Commerce II. (3).** German business terminology and correspondence; reading of business, technical, commercial publications. PREREQUISITE: GERM 2020, 2021, or equivalent.

**GERM 4443. Major German Writers of the Twentieth Century. (3).** Selected works of Hesse, Thomas Mann, Kafka, Frisch, Duerrenmatt, Brecht, and Boell. PREREQUISITE: two courses from the group GERM 3301, 3302, 3411, 3412, or permission of instructor.

**GERM 4451-6451. The German Drama. (3).** Survey of dramatic literature from sixteenth to twentieth centuries; readings from Reformation, Baroque, Enlightenment, Sturm und Drang, Classicism, Romanticism, Realism, and modern period. PREREQUISITE: two

courses from the group GERM 3301, 3302, 3411, 3412, or permission of instructor.

**GERM 4465. German Narrative Prose. (3).** Reading of major prose writings from Romanticism to present; emphasis on the Novelle. PREREQUISITE: two courses from the group GERM 3301, 3302, 3411, 3412, or permission of instructor.

**GERM 4466. German Poetry. (3).** Overview of German poetry since 1600; emphasis on sociohistorical aspects, formal and structural analysis of selected works. PREREQUISITE: two courses from the group GERM 3301, 3302, 3411, 3412, or permission of instructor.

**GERM 4480. Goethe. (3).** Special emphasis on early and late poetry, Die Leiden des jungen Werthers, and Faust, part 1. PREREQUISITE: two courses from the group GERM 3301, 3302, 3411, 3412, or permission of instructor.

**GERM 4501. Applied German Linguistics. (3).** Application of modern linguistic theories to learning German. PREREQUISITE: GERM 3301, 3302, or permission of instructor.

**GERM 4511. The German Language: Development and Structure. (3).** German language in its various stages of development. PREREQUISITE: GERM 3301, 3302, or permission of instructor.

**GERM 4780. Individual Studies in German. (1-3).** Directed individual study in selected areas of German chosen in consultation with instructor. May be repeated for a maximum of 6 hours credit by permission of chair. PREREQUISITE: permission of instructor. (A-F, IP)

**GERM 4791-99. Special Topics in German Language or Literature. (3).** May be repeated for maximum of 6 hours credit. PREREQUISITE: two courses from GERM 3301, 3302, 3411, 3412, or permission of instructor.

## (GREK) GREEK

### Department of Foreign Languages and Literatures

RALPH ALBANESE, Ph.D., *Chair*
*Room 375, Dunn Hall*
*http://fl.memphis.edu*

**GREK 1010. Elementary Greek I. (3). (1101).** Elements of grammar and syntax of classical and koine Greek; practice in reading and translation. ♦

**GREK 1020. Elementary Greek II. (3). (1102).** Continuation of grammar and syntax of classical and koine Greek; practice in reading and translation of both classical and New Testament Greek. PREREQUISITE: GREK 1010, or equivalent. ♦

**GREK 2010. Intermediate Greek I. (3). (2201).** Comprehensive review of Greek grammar; practice in reading and translation of both classical and New Testament Greek. PREREQUISITE: GREK 1020, or equivalent. ♦

**GREK 2020. Intermediate Greek II. (3). (2202).** Readings in unaltered classical and New Testament Greek; emphasis on interpretive techniques used in reading primary texts. PREREQUISITE: GREK 2010, or equivalent. ♦

**GREK 3111. Greek Historians. (3).** Reading and analysis of selections from writings of Herodotus, Thucydides, and later Greek historians. PREREQUISITE: GREK 2020, or equivalent.

**GREK 3511. Greek Tragedy. (3).** Reading and analysis of selected tragedies of Aeschylus, Sophocles, and Euripides. PREREQUISITE: GREK 2020, or equivalent.

**GREK 3911. Plato's Apology, Crito. (3).** Reading and analysis of dialogues of Plato that give a prelude to death of Socrates.

**GREK 4441. Homer. (3).** Reading and analysis of selections from Homer's Iliad and Odyssey. PREREQUISITE: GREK 2020, or equivalent.

## (HADM) HEALTH ADMINISTRATION

### School of Urban Affairs and Public Policy

PAUL FITZGERALD, *Ph.D., Director*
*Room 230, McCord Hall*
*http://www.people.memphis.edu/~gahealthadm/index.html*

**HADM 4101-6101. Health Systems. (3).** Analysis of health and medical care systems with reference to public, private and voluntary agencies at local, state, regional, and national levels; orients administrators to health and medical care systems with which they may work. PREREQUISITE: junior or senior standing.

## (HEBR) HEBREW

### Department of Foreign Languages and Literatures

RALPH ALBANESE, Ph.D., *Chair*
*Room 375, Dunn Hall*
*http://fl.memphis.edu*

**HEBR 1010. Elementary Hebrew I. (3). (1101).** Principles of pronunciation; everyday expressions: basic sentence patterns through oral practice, writing and reading. ♦

**HEBR 1020. Elementary Hebrew II. (3). (1102).** Continued study of sentence patterns through oral and written practice. PREREQUISITE: HEBR 1010, or equivalent. ♦

**HEBR 2010. Intermediate Hebrew I. (3). (2201).** Continued study of sentence patterns through oral and written practice. PREREQUISITE: HEBR 1020, or equivalent. ♦

**HEBR 2020. Intermediate Hebrew II. (3). (2202).** Continued study of sentence patterns through oral and written practice. PREREQUISITE: HEBR 2010, or equivalent. ♦

## (HIST) HISTORY

F. JACK HURLEY, Ph.D., *Chair*
*Room 100, Mitchell Hall*
*http://www.people.memphis.edu/~history/*

**HIST 1110. The Development of World Civilization I. (3). (1301).** Especially recommended for freshmen; traces forms of civilization from beginnings to 1500. **[G]** ♦

**HIST 1120. The Development of World Civilization II. (3). (1302).** Especially recommended for freshmen; traces forms of civilization from 1500 to present. **[G]** ♦

**HIST 2010. The United States to 1877. (3). (2601).** United States from discovery to end of political reconstruction. **[G]** ♦

**HIST 2020. The United State Since 1877. (3). (2602).** United States from 1877 to present. **[G]** ♦

**HIST 2030. History of Tennessee. (3). (3900).** Political, economic, and social development of Tennessee from earliest times. **[G]** ♦

**HIST 3035. Technology and Culture in American History. (3).** Interrelationship between technology and culture; emphasis on 19th and early 20th centuries.

**HIST 3045. Quantification and History. (3).** Concepts of quantification in history; survey of literature of quantitative history; practical work in quantitative methods in history. PREREQUISITE: COMP 1200 or its equivalent, or successful completion of University's computer literacy examination. **[C]**

**HIST 3121. England Before 1714. (3).** Political, constitutional, cultural, social, and economic development of England from coming of Anglo-Saxons until Hanoverian accession in 1714.

**HIST 3122. England Since 1714. (3).** Development of England's democratic government, considering economic, social, intellectual, diplomatic, and imperial affairs.

**HIST 3211. Colonial Latin America. (3).** Political, economic, social and cultural development in Latin America from pre-conquest era to 1808.

**HIST 3212. The Latin American Nations. (3).** Major political, economic, and social trends in Latin America since 1808; emphasis on Argentina, Brazil, Chile, and Mexico.

**HIST 3273. Islamic Civilization. (3).** Survey of the development of Islamic religious, social, political, intellectual, and cultural traditions from the time of Muhammad through the 18th century; geographical focus is the Middle East, India, Asia, and Africa.

**HIST 3274. Modern Islamic World. (3).** Survey of the Islamic World from 1800 to the present, focusing on the role of Islam in the political and social development of the Middle East, India, Asia, and Africa, as well as the emergence of Islamic communities in Europe and the Americas.

**HIST 3275. History of the Jewish People. (3).** History of Jewish people from antiquity to present; emphasis on their changing relationships to larger cultures in which they participated.

**HIST 3280. African Civilization. (3).** Survey of Africa's historical and cultural diversity, including African religious, social, political, intellectual, cultural, and artistic heritage, from ancient to modern times.

**HIST 3290. Traditional Asia. (3).** Comparative survey of civilizations in India, China, Japan, and Southeast Asia, from their beginnings through the 18th century.

**HIST 3291. Modern Asia. (3).** Asia from 1800 to present, focusing on Asian reactions to colonialism, and rise of modern nation states in India, Japan, China, and Southeast Asia.

**HIST 3300. The Ascent to Civilization. (3). (Same as ANTH 3300).** Interdisciplinary integrative examination of nature of civilization through investigation of origins of civilization and comparative study of world's earliest civilizations. PREREQUISITE: 9 hours of history or anthropology, including either HIST 1110 or ANTH 1100. **[I]**

**HIST 3301. Early Modern Europe, 1500-1800. (3).**

**HIST 3302. Modern Europe, 1800 to Present. (3).**

**HIST 3320. The Ancient World. (3).** Survey of civilizations of ancient Egypt and the Near East, Greece, and Rome.

**HIST 3370. Medieval and Renaissance Europe. (3).** Political, religious, social, economic, intellectual, cultural, and artistic developments in Europe from the 6th to the 16th centuries; ways of thought and life; collapse and recovery after the fall of the Roman Empire; flourishing of High Medieval culture; disasters after 1300; rise of humanism; Italian and Northern Renaissance.

**HIST 3506. Cultural and Intellectual History of Europe. (3).** Topics in history of European culture and thought from late Middle Ages to twentieth century. **[W]**

**HIST 3803. American Diplomatic History. (3).** Though including the 18th and 19th centuries, course concentrates on 20th century; emphasizes relationship between foreign policy and domestic forces.

**HIST 3811. United States Military and Naval History. (3).** Developments since colonial period; emphasis on background and growth of national military and naval establishments, military and naval thought, difficulties accompanying modernization and assumption of global responsibilities, and problem of relationship between civilian and military-naval sectors in democracy.

**HIST 3815. World War II. (3).** Broad overview of origins, principal campaigns, and effects of World War II with some attention to domestic considerations; legacy of Great War, blitzkrieg, invasion of Europe, Pearl Harbor, Battle of Midway, defeat of Germany and Japan, and domestic impact of the war.

**HIST 3817. Vietnam War in Global Perspective. (3).** Traditional Vietnamese culture, its response to contact with the West and, more extensively, involvement of United States in the Indochina War.

**HIST 3823. Economic History of the United States. (3).**

**HIST 3840. United States Constitutional History. (3).** Constitutional developments from colonial period to present; English heritage, constitutional antecedents of revolutionary era, origins and growth of federal system under Constitution of 1787, and evolution of modern constitutional government in United States.

**HIST 3863. Social and Intellectual History of the United States. (3).** Survey of way Americans have thought about essential features of social and political order; development of and debate over central ideas of equality, freedom, and individualism that have defined the order of the common life. **[G]** ♦

**HIST 3905. History of Memphis. (3).** Political, social and economic aspects of development of Memphis from foundation to present.

**HIST 3920. The Old South. (3).** Southern institutions prior to outbreak of Civil War.

**HIST 3930. The New South. (3).** South from Civil War to present.

**HIST 4003. The Philosophy of History. (3).** History as a distinct discipline; thought of leading Western philosophers of history about nature of history in its two senses: history as actuality and history as thought about actuality. **[W]**

**HIST 4012. Directed Readings, Honors. (3).** Under the direction of faculty member, student reads about particular topic or topics. PREREQUISITE: admission to Honors Program. (A-F, IP)

**HIST 4014. Directed Readings. (1-3).** Readings on particular topic in history under supervision of member of faculty. (A-F, IP)

**HIST 4020-6020. Internship in History. (3-12).** Supervised internships working with various governmental agencies, private foundations or businesses of interest to historians. May be repeated for a maximum of 12 hours credit. PREREQUISITE: permission of department. (A-F, IP)

**HIST 4022-6022. Oral History. (3).** Applied history, covering oral history theory, research, and interviewing procedures.

**HIST 4050-69-6050-69. Special Topics in History. (1-3).** Topics are varied and in online class listings.

**HIST 4126-6126. Victorian and Edwardian England. (3).** Social, political, and cultural adjustments of England to experience of industrialization in 19th and early 20th centuries.

**HIST 4145-6145. History of Modern Germany. (3).** Germany from origins of unification movement in Napoleonic Era through Second World War.

**HIST 4160-6160. Russia to 1917. (3).** Russia from earliest times to 1917; emphasis on the rise of serfdom and autocracy and evolution of revolutionary movement.

**HIST 4162-6162. History of the Soviet Union. (3).** Detailed study of 1917 Revolution and major developments in government, economy, cultural and social life, and international affairs that followed. **[W]**

**HIST 4200-6200. History of Spain. (3).** Spanish institutions, culture and politics from ancient times to present.

**HIST 4240-6240. History of Mexico. (3).** Political, economic, social, and cultural development of Mexico from ancient times to present.

**HIST 4260-6260. The World Since 1945. (3).** Global ideological, economic and political developments since World War II; affluence of industrial free market, movement of former colonies to independence, and growth in diversity among Soviet bloc nations.

**HIST 4272-6272. Modern Middle East. (3).** Political, diplomatic, social and religious developments in Middle East from 1800 to present.

**HIST 4273-6273. Islamic Egypt. (3).** Study of the political, economic, social, and cultural development of Egypt from the Islamic conquest (640) to the present.

**HIST 4285-6285. Africa: Antiquity and Tradition. (3).** African history from ancient civilizations to Sudanic kingdoms; social, political, economic, intellectual, and cultural developments of Africa from the earliest human records to era of the great states of the western Sudan; emphasis on African ecumena, traditions of the major regions of the continent.

**HIST 4286-6286. Africa: Continuity and Flux. (3).** African history in the period of globalization from the slave trade to colonialism; social, political, economic, intellectual, and cultural developments of Africa; Africa's involvement in the Atlantic world; major regions of the continent with emphasis on precolonial topics.

**HIST 4287-6287. Africa: Twentieth Century. (3).** Colonialisms and nationalisms in Africa; history of colonial and post-independence periods, with focus on examining major issues in modern African history from modern African intellectual perspectives; emphasis on nationalist and pan-Africanist analytical frameworks.

**HIST 4292-6292. History of Modern China, 1800 to the Present. (3).**

**HIST 4294-6294. History of Modern Japan, 1800 to the Present. (3).**

**HIST 4295-6295. Intellectual History of East Asia Since 1800. (3).** Evolution of modern Chinese and Japanese thought.

**HIST 4320-6320. Ancient Near East. (3).** From beginning Mesopotamia down through the great oriental empires of Assyria, Babylon, Persia.

**HIST 4321-6321. The Greek Experience. (3).** Politics. society and culture in ancient Greece to Alexander the Great.

**HIST 4322-6322. The Roman World. (3).** Hellenistic kingdoms and Roman Empire.

**HIST 4323-6323. Egypt of the Pharaohs. (3).** Survey of ancient Egyptian civilization, covering major political and social developments, religion, writing and literature, Egypt's relations with the rest of Africa, and sample problems illustrating how Egyptologists make sense of the scattered remains from which our understanding of ancient Egypt must be built.

**HIST 4361-6361. History of the Byzantine Empire. (3).** Byzantine or East Roman Empire from 330 to 1453 and its influence on Slavic, Turkic, and Islamic peoples.

**HIST 4372-6372. The High Middle Ages. (3).** Summary of the Early Middle Ages, economic, technological, cultural, intellectual, and religious expansion after 1000; courtly love, Romanesque and Gothic art; limited government, church and state conflicts; reason vs revelation; universities, scholasticism, women, Judaism, science, Franciscans, heretics; life of ordinary people; disasters of the 14th century; roots of the Renaissance.

**HIST 4380-6380. Renaissance Europe, 1300-1520. (3).** Rise of humanism during 14th century disasters; intellectual, economic, social, cultural, religious, and artistic developments of 14th through 16th centuries, emphasizing Italy, especially Florence; women, life of ordinary people; guilds, republicanism and despotism, neoplatonism; Christian and civic humanism;, Northern Renaissance.

**HIST 4390-6390. Europe in the Age of the Reformation. (3).** Characteristic political, social, economic, intellectual, and cultural developments and religious conflicts of late 15th and 16th centuries.

**HIST 4401-6401. Europe in the Age of the Baroque. (3).** Political crises, development of monarchial absolutism, rise of modern science, and cultural synthesis in 17th century.

**HIST 4440-6440. The Era of the French Revolution. (3).** The Old Regime, origins and development of Enlightenment thought, and revolutionary and counter-revolutionary movements in 18th century Europe.

**HIST 4453-6453. Europe, 1815-1914. (3).**

**HIST 4461-6461. Europe, 1914-1945.(3).**

**HIST 4620-6620. Colonial America, to 1783. (3).** Political development and economic, social and cultural institutions of English Colonies in America; origins and conduct of American Revolution.

**HIST 4630-6630. The New Nation, 1783-1815. (3).**

**HIST 4640-6640. Jacksonian America, 1815-1850. (3).**

**HIST 4670-6670. Civil War and Reconstruction, 1850-1877. (3).**

**HIST 4680-6680. Emergence of Modern America, 1877-1914. (3).** United States from end of Reconstruction to outbreak of World War I.

**HIST 4701-6701. The United States, 1914 to the Second World War. (3).** United States from outbreak of World War I to World War II.

**HIST 4702-6702. United States from the Second World War. (3).** The United States from World War II to present.

**HIST 4823-6823. American Labor History. (3).** Historical development of labor movement in United States; emphasis on social, economic, and political trends related to labor movement.

**HIST 4824-6824. Business History. (3).** Historical development of business in the United States; attention to social, economic, and political trends related to American business communities.

**HIST 4831-6831. History of American Family. (3).** Analysis of changes in family size and structure and relationships between family and society from colonial times to present.

**HIST 4851-6851. History of Women in America. (3).** History of women from discovery of America to present. **[G]** ♦

**HIST 4853-6853. History of African American Women. (3).** Social, political, economic and cultural history of African American women from the sixteenth century to the present.

**HIST 4861-6861. Parks/People/Public Policy. (3).** Comparative study of history and administration of public land areas in the United States, and of American conservation.

**HIST 4863-6863. History of Childhood in America. (3).** Historical consideration of children and childhood in American society from early 17th century to present. **[W]**

**HIST 4871-6871. United States Urban History. (3).** Development of American cities, including formation of local social, economic, and political institutions, and impact of urbanization on United States.

**HIST 4881-6881. African American History. (3).** History and culture of African Americans in light of their experiences; aspects of African American life and attitudes of dominant society within which African Americans lived; ways African American men and women shaped and nurtured their own lives, culture and history in U.S. **[G]** ♦

**HIST 4882-6882. Civil Rights Movement in the United States Since 1930. (3).** Struggle for African American equality; key civil rights issues, events, leaders, and strategies.

**HIST 4941-6941. History of the American Indian. (3).** Role of Indian in American history.

**HIST 4996. Honors Thesis. (3).** Under direction of faculty member, and with approval of Honors Committee, student writes thesis based on research in primary and/or secondary sources. PREREQUISITE: admission to Honors Program. Credit cannot be earned for both HIST 4996 and 4998. (A-F, IP)

**HIST 4998. Historical Research and Writing. (3).** The nature of historical research and writing as practiced by professional historians; includes the writing of a substantial research paper. PREREQUISITE: 21 hours in history. Credit cannot be earned for both HIST 4996 and 4998.

**HIST 4999. The Nature of Historical Inquiry. (3).** A synthetic examination of the nature of historical inquiry as practiced by the discipline of history; historical interpretation and controversy; analyses of historical sources; historical research and writing and integration of the various subfields of the discipline of history. PREREQUISITE: 21 hours in history. **[I]**

## (HMSE) HUMAN MOVEMENT SCIENCES AND EDUCATION

MICHAEL H. HAMRICK , Ed.D., *Chair*
*Room 106, Elma Neal Roane Fieldhouse*
*http://www.hmse.memphis.edu/*

**HMSE 1100. Concepts of Fitness and Wellness. (2).** Emphasis on individual responsibility for achieving optimal well-being and preventive health practices that promote healthful lifestyles and reduce risk factors **[G]** ♦

**HMSE 2102. First Aid and CPR. (3).** Safety skills and techniques of immediate and temporary care in the event of injury or sudden illness. Includes necessary training and skill for CPR certification. Successful completion qualifies the student for First Aid certificate endorsed by the American Red Cross. This course may be taken to improve the grade for one, but not both, of the former courses.

**HMSE 4305. Problems in Human Movement Sciences and Education. (1-3).** Independent study and/or research project on human

movement science problem, issue, or concern. PREREQUISITE: permission of instructor and coordinator of undergraduate studies. (S/U)

**HMSE 4999. Senior Project in Human Movement Sciences and Education. (3).** Comprehensive final project demonstrating mastery of pedagogy and knowledge. Emphasis on independent work, class discussion and student project. Students will receive a letter grade or an in-progress grade. This represents a culminating experience and can only be conducted when all other course work is complete. PREREQUISITE: senior status and permission of instructor. COREQUISITE: SLS 4605. (A-F, IP) [I]

## (HPRM) HOSPITALITY AND RESORT MANAGEMENT

ROBERT R. TAYLOR, Ph.D., *Chair*
ROBERT M. O'HALLORAN, Ph.D., *Director*

*Room 202, Fogelman College of Business and Economics Administration Building*

**Students must have junior standing and have met specific course prerequisites with a minimum grade of "C" (2.0) to be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of "C" (2.0) in each; (2) minimum of 2.25 GPA (2.5 GPA for Accounting majors) in all required lower division business courses and MATH 1830, and (3) 55 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements).**

**A surcharge of $10.00 per credit hour for 3000 and 4000 level courses and $20.00 per credit hour for 6000-9000 level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).**

**HPRM 1010. Introduction to Hospitality and Resort Management. (3).** Varied aspects of hospitality and resort industry and careers using Umbrella of Tourism framework; lodging, food service, clubs, cruise lines, natural and man-made attractions, retail, special events and activities, tour operators.

**HPRM 2000. Tourism Management. (3).** Travel, destination, marketing strategy; promotion; distribution of travel services.

**HPRM 3010. Hospitality and Resort Industry Colloquium. (1).** Introduction to hospitality and resort industry; presentations and discussions by major industry professionals; students submission of a synopsis of each speaker's major points.

**HPRM 3330. Managing Hotel and Resort Operations. (3). (4330).** Management of critical resources for running hotel and resort operation in effective and efficient manner; customer services, service quality, and service delivery. PREREQUISITE: ISDS 3510.

**HPRM 3600. Entertainment Management. (3).** Fundamental standards, techniques, practices of club, cruise, gaming, theme park, special events management. PREREQUISITE: HPRM 1010, 2000.

**HPRM 4111. Internship in Hospitality and Resort Management. (1).** Internship in structured learning environment in field. PREREQUISITE: permission of instructor.

**HPRM 4315. Hospitality Human Resource Management. (3).** Acquisition, utilization, and retention of human resources in hospitality industry; human resource planning, job analysis, recruitment, selection, orientation, training, development, motivation, associate relations, performance appraisal, legal issues. PREREQUISITE: MGMT 3110.

**HPRM 4320. Hospitality Services Marketing. (3).** Principles and models of services marketing; applications to hospitality services industry; expansion of traditional marketing mix variables into additional development of hospitality service concepts, marketing plans, and service quality assessments. PREREQUISITE: MKTG 3010.

**HPRM 4322. Advanced Food and Beverage Management. (3). (Same as CSED 4322).** Foundations of managing restaurants and associated beverage operations; planning and control procedures, human resources management, customer service, marketing strategies, and emerging technologies; relationship between food and beverage operations and overall hospitality organization. PREREQUISITE: MGMT 3110, MKTG 3010, or permission of department chair.

**HPRM 4331. Advanced Resort and Lodging Management. (3).** Issues, theories, and best practices of resort and lodging industry. PREREQUISITE: HPRM 3330, MGMT 3110, 3510.

**HPRM 4340. Information Technology for Hospitality and Resort Management. (3).** Framework for information technology, systems development methodologies, and strategic information systems planning; current issues relating to the hospitality industry; information technology in networked environment to achieve organizational goals and objectives.

**HPRM 4350. Properties Development and Planning. (3).** Problems and opportunities inherent in developing and planning resort and hospitality facilities; sequence of property development; conceptual and space planning; design criteria, and construction management; appropriate facilities requirements; industry practices; implementing properties decisions with integrated design, operations, financial and real estate framework.

**HPRM 4400. International Hospitality. (3).** Issues, challenges and practices of global hospitality and tourism marketplace.

**HPRM 4600. Trends in Hospitality and Resort Management. (3).** Current issues and challenges of global hospitality and tourism industry. PREREQUISITE: HPRM 4111, 4315, 4320, and senior standing.

**HPRM 4700. Integrative Leadership Challenge for the Hospitality Industry. (3).** Capstone course integrating academic and experiential learning through service learning projects building on leadership skills. PREREQUISITE: HPRM 4111, 4315, 4320.

**HPRM 4911. Internship in Hospitality and Resort Management. (3).** Entails the involvement of the student to gain on-the-job experience in a hospitality organization. Project must be approved and supervised by department faculty members in coordination with professionals from business organizations. (A-F, IP)

**HPRM 4950-59. Special Topics in Hospitality and Resort Management. (3).** Topics are varied and in online class listings. May be repeated with change in topic. PREREQUISITE: permission of instructor.

## (HPRO) HEALTH PROMOTION

### Department of Human Movement Sciences and Education

MICHAEL H. HAMRICK, Ed.D., *Chair*
*Room 106, Elma Neal Roane Fieldhouse*
*http://www.hmse.memphis.edu/*

**HPRO 4000-6000. Lifetime Wellness I. (3).** Concepts, applications and assessments for secondary teachers of Lifetime Wellness; emphasis on personal fitness, disease prevention and nutrition.

**HPRO 4001-6001. Lifetime Wellness II. (3).** Concepts, applications and assessments for secondary teachers of Lifetime Wellness; emphasis on mental health, safety and first aid, sexuality and family life, and substance use/abuse.

**HPRO 4401-6401. Death and Dying Education. (3).** An examination of dying and death phenomena via cognitive, affective, experiential and cultural perspectives.

**HPRO 4501-6501. Sexuality Education. (3).** Special study of selected phases of human sexuality.

**HPRO 4601-6601. Drug Education. (3).** Examines current issues concerning drug use and abuse including etiology, knowledge base, drug laws, and educational prevention approaches.

## (ICL) INSTRUCTION AND CURRICULUM LEADERSHIP

DENNIE L. SMITH, Ed.D., *Chair*
*Room 106D, E.C. Ball Hall*

*http://www.coe.memphis.edu/coe/ICL/icl.html*

**ICL 3000. Principles of Teaching. (3).** Research practices and application of principles of instruction that promote effective teaching and facilitate cognition. PREREQUISITE: EDPR 2111, LEAD 2010.

**ICL 3901. Special Problems in Instruction. (1-6).** Supervised individual investigation in area of instruction. PREREQUISITE: experience as teacher or satisfactory evidence of being qualified to benefit from course. (A-F, IP)

**ICL 4001. Learning in the Urban Environment. (3).** Use of appropriate knowledge and skills for managing total learning environment in both early and middle school setting; emphasis on development of skills that facilitate effective teaching through appropriate management techniques and involvement of parents and community members. *Ten hours field experiences* PREREQUISITE: LEAD 2010, SPED 2000..

**ICL 4121-6121. Library Materials for Young People and Adults. (3).** Evaluation and selection of books and related library materials for leisure interests and curriculum needs of young people and adults from junior high school up; extensive reading, introduction to selection criteria, bibliographic aids, authors and illustrators, and types of literature and information books.

**ICL 4450. Individualized Instruction Practicum. (1-3).** Implementation of instruction in individual and small group situations for learners experiencing difficulty in selected basic skills areas; requires design and delivery of tutorial type instruction under guidance of supervisory personnel. May be repeated for a maximum of 9 hours credit. (S/U).

**ICL 4701-09-6701-09. Workshops in Curriculum and Instructional Leadership. (1-9).** Various areas of curriculum and elements of instruction explored. Active student participation included. See online class listings for specific workshop number and topic. May be repeated for maximum of 9 hours credit in any one topic. (S/U).

**ICL 4715. Clinical/Practicum. (2).** Seminars and participation as assistant to classroom teacher; emphasis on teacher roles and on adapting subject discipline to school curriculum. PREREQUISITE: EDPR 2211, LEAD 2010. (S/U).

**ICL 4761-6761. Aerospace Education in Schools (3).** Aerospace content and flight experiences; emphasizes classroom application.

**ICL 4762-6762. Advanced Aerospace Education in Schools. (3).** Theory, principles and practices related to historical development of aerospace; emphasis on both civilian and military uses of aerospace capabilities. Appropriate utilization of aerospace research, concepts, and "spinoffs" for instructional purposes in the classroom at all grade levels. PREREQUISITE: ICL 4761.

**ICL 4800. Professional Seminar. (3).** Senior seminar taken concurrently with student teaching which requires students to analyze and seek solutions to problems encountered in current practices and issues in education. Students draw upon each specialization within discipline to integrate and synthesize knowledge and experience in development of their roles as professional educational leaders. COREQUISITE: student teaching. **[I]** (S/U).

**ICL 4901-4919. Student Teaching. (2-10).** Full-time planned and supervised experience in a setting appropriate to student's area of specialization providing opportunities to synthesize knowledge and skills and demonstrate professional competencies in educational setting. PREREQUISITE: approval from Teacher Education Director. COREQUISITE: ICL 4800. (S/U)

**ICL 4901. Student Teaching in Kindergarten.** (S/U).

**ICL 4902. Student Teaching in Primary Grades.** (S/U).

**ICL 4903. Student Teaching in Preschool.** (S/U).

**ICL 4904. Student Teaching in Grades 1-8.** (S/U).

**ICL 4905. Student Teaching in Special Education: Modified.** (S/U).

**ICL 4906. Student Teaching in Special Education: Comprehensive.** (S/U).

**ICL 4907. Student Teaching in Secondary School..** (S/U).

**ICL 4908. Student Teaching in Health.** (S/U).

**ICL 4909. Student Teaching in Exercise Science and Education.** (S/U).

**ICL 4910. Student Teaching in Vocational Consumer Science.** (S/U).

**ICL 4911. Student Teaching in Music.** (S/U).

**ICL 4912. Student Teaching in Art.** (S/U).

**ICL 4950-59-6950-59. Special Topics in Instruction and Curriculum Leadership. (1-3).** Current topics in areas of curriculum and instruction at all levels. Topics are varied and in online class listings.

**ICL 4960. Academic Content for Teaching. (1-9).** Academic content areas in disciplines supportive of school curriculum. May be repeated to remove deficits for teacher licensure and with change of content. **(F, Sp).** (A-F, IP)

## (IDT) INSTRUCTIONAL DESIGN AND TECHNOLOGY

DENNIE L. SMITH, Ed.D., *Chair*
*Room 106D, E.C. Ball Hall*

*http:/www/coe.memphis.edu/coe/ICL/icl.html*

**IDT 3600. Technology in Education. (3). (ICL 3600).** Integration of varied uses of technology into classroom learning environment while increasing students' technological knowledge and skills; word processing, databases, spreadsheets, authoring, internet browsers, presentation, communication. *Five hours field experience required.*

## (INSE) INDUSTRIAL AND SYSTEMS ENGINEERING

### Department of Mechanical Engineering

MICHAEL RACER, Ph.D., *Coordinator*
*Room 312 A, Engineering Science Building*

**INSE 3601. Engineering Design and Analysis. (3).** Review of probability theory, random variables, mathematical expectations; introduction to sampling distributions, estimation theory, hypothesis testing, and regression; applications oriented toward engineering. **(Sp).**

**INSE 3610. Operations Research I. (3).** Introduction to essential optimization tools; linear programming, goal programming, network analysis, dynamic programming, integer programming, nonlinear programming; presentation of case studies. **(F). [C]**

**INSE 3612. Engineering Applications in Linear Optimization. (3).** Review of linear algebra fundamentals; emphasis on modeling and formulation of LP's; development and use of simplex method, revised simplex method; development of linear models for problems in a range of engineering disciplines; motivation and use of duality, and sensitivity analysis. **(Sp).** PREREQUISITE: MATH 4240, INSE 3610.

**INSE 3640. Operations Research II. (3).** Review of probability; introduction to renewal processes, Markov Chains, and queuing; emphasis on applications. **(Sp).** PREREQUISITE: MATH 4637.

**INSE 3644. Simulation. (3).** Introduction to discrete and continuous event simulation; code development and verification; data collection and analysis emphasized; model validation, and performance enhancement techniques discussed. **(F).** PREREQUISITE: INSE 3601, 3640.

**INSE 4608. Modeling. (3).** Issues in problem formulation and modeling philosophy; case studies and formulation; emphasis on the process, rather than the product; deterministic and stochastic models; data structures. **(F).** PREREQUISITE: INSE 3601, 3610, 3640. **[W]**

**INSE 4610. Integer Programming. (3).** Optimization and heuristic techniques; branch-and-bound, cutting plane are emphasized; case studies; brief introduction to complexity theory. **(Sp).** PREREQUISITE: INSE 3610, 3612.

**INSE 4612. Network Models. (3).** Path and tree problems introduced; focus on network flow problems; discussions and case studies; scheduling problems will be addressed. **(F).** PREREQUISITE: INSE 3610, 3612.

**INSE 4614. Dynamic Programming. (3).** Both deterministic and stochastic models discussed; emphasis on formulation of models, with applications in equipment replacement, resource allocation, scheduling, and search. **(F).** PREREQUISITE: INSE 3610, 3612.

**INSE 4642. Forecasting. (3).** Development of trend analysis; ARMA/ARIMA Models and Box-Jenkins are central; smoothing techniques, trends/seasonalities, regression, econometric models. **(F).** PREREQUISITE: INSE 3640.

**INSE 4644. Inventory and Queuing. (3).** Graphical representations of arrivals, storages, delays, and departures; time-dependent demand, and pulsed processes; deterministic analyses of simple systems; applications from service and manufacturing. **(Sp).** PREREQUISITE: INSE 3640.

**INSE 4670. Quality Assurance and Reliability. (3).** Data display and reduction; sampling techniques; economics of sampling; quality by design; network and component reliability; applications in equipment management. **(Sp).** PREREQUISITE: INSE 3640.

**INSE 4671. Production Planning and Control. (3).** Production and operations management strategy; simple forecasting methods, workforce planning, inventory control, production planning, materials requirements planning, supply chain management, operations scheduling, project management.

**INSE 4672. Work Measurements. (3).** Performance standards, job evaluation, work sampling, process capability, time and motion studies. **(F).**

**INSE 4674. Production Systems. (3).** Overview of common and leading edge manufacturing processes; system design and evaluation; modeling CIM, MRP, JIT, group technology, and TQM; project management. **(Sp).**

**INSE 4676. Facilities Planning. (3).** Systems design and evaluation; development and use of computer support tools; line balancing, conveyor systems, integrated material control systems. **(F).**

**INSE 4678. Logistics. (3).** Logistic design and analysis; storage and retrieval, and inventory management systems; use of computer condor systems emphasized; automated mechanisms discussed. **(Sp).**

**INSE 4690. Seminar. (1-3).** Presentations by faculty, members of local industry, and upper division and graduate students. May be repeated for a maximum of 6 hours credit. **(F, Sp).**

**INSE 4691. Project. (3).** Design and analysis of a systems engineering problem; evaluation of criteria and objectives; includes final oral and written reports. PREREQUISITE: must be taken in final semester. **(F, Sp). [I]**

**INSE 4990-98. Special Topics in Industrial and Systems Engineering. (1-3).** Topics are varied and in online class listings.

## (INTD) INTERDISCIPLINARY STUDIES

**Interdisciplinary Studies Office**
*Room 213, Mitchell Hall*

The following courses, INTD 2100, 4100-4110, and 4120-4130, compose part of the Interdisciplinary Environmental Studies Program described under the College of Arts and Sciences. Before offering any of these courses, an instructor must gain approval from the University's Environmental Research, Issues, and Programs Committee, room 213, Mitchell Hall.

**INTD 2100. Introduction to Environmental Studies. (3).** Interdisciplinary environmental science course that integrates material from the physical, natural and social sciences including ecosystems, land and water resources, population dynamics and control, pollution, and environment and society.

**INTD 4100-4110. Topics in Biological-Physical Environmental Studies. (3).** Each offering of this course must be approved by the Environmental Research, Issues, and Programs Committee. A student may repeat this course when the topics are different for a maximum of 6 hours credit for INTD 4100-4110.

**INTD 4120-4130. Topics in Socio-Behavioral Environmental Studies. (3).** Each offering of this course must be approved by the Environmental Research, Issues, and Programs Committee. A student may repeat this course when the topics are different for a maximum of 6 hours credit for INTD 4120-4130.

## (INTL) INTERNATIONAL STUDIES

**Interdisciplinary Studies Office**
*Room 213, Mitchell Hall*
*http://cas.memphis.edu/isc/intl/*

**INTL 4601. Seminar in International Studies. (3).** Investigation of selected topics in international relations from interdisciplinary perspective. Individual research and presentation of major paper that integrates tools, data or concepts of two or more disciplines. PREREQUISITE: permission of Director of International Studies. **[W, I]**

**INTL 4911. Internship in International Studies. (1-6).** Practical experience in international organization. Students placed for some period of time with governmental or private organization to obtain practical experience in foreign policy making, problems of development, and/or cross-cultural communication. Academic credit granted upon certification of cooperating agency and acceptance by faculty of written report by student. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of Director of International Studies. (A-F, IP)

**INTL 4912. Directed Individual Study. (1-6).** Individually directed advanced reading and/or research in special areas of interest. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of Director of International Studies. (A-F, IP)

## (ISDS) INFORMATION SYSTEMS

**Department of Management Information Systems**

JUDITH CANFIELD SIMON, Ed.D., *Chair*
*Room 300, Fogelman College of Business and Economics Administration Building*

**Students must have junior standing and have met specific course prerequisites with a minimum grade of "C" (2.0) to be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of "C" (2.0) in each; (2) minimum of 2.25 GPA (2.5 for Accounting majors) in all required lower division business courses and MATH 1830, and (3) 55 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements).**

**A surcharge of $10 per credit hour for 3000 and 4000 level courses and $20 per credit hour for 6000-9000 level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).**

**ISDS 2749. Introduction to Business Microcomputer Applications. (3).** Introduction to use of microcomputers for performing business activities; use of lab environment with direct instruction uses of current software and electronic communication.

**ISDS 2755. Introduction to Management Information Systems. (3).** Introduction to major concepts in business information systems; emphasis on use of information systems to solve business problems. PREREQUISITE: ISDS 2749.

**ISDS 2770. Computer Hardware/Software. (3).** Provides experience working with common operating systems including UNIX, DOS/Windows, and Mainframe; file manipulation, editing functions, communication, and shell programming. PREREQUISITE: ISDS 2749, 2755.

**ISDS 3745. Application Program Development I. (3).** Introduction to business application programming; program development using languages and techniques widely employed in business environment. PREREQUISITE: ISDS 2770.

**ISDS 3755. Application Program Development II. (3).** Intermediate level business application program development using languages and techniques widely employed in business environment. PREREQUISITE: ISDS 3745, or equivalent.

**ISDS 3765. Electronic Commerce Business Applications. (3).** Basic electronic commerce concepts illustrating how technologies are applied within the context of supply chain management. PREREQUISITE: ISDS 2749 and 2755.

**ISDS 3770. Systems Analysis Methods. (3).** Overview of systems development life cycle; emphasis on current systems documentation through use of classical and structured tools and techniques for describing process flows and data flows, data structures, file and input/output design and program specifications, data gathering and information reporting activities, transition from analysis to design. PREREQUISITE: ISDS 3745, 3775.

**ISDS 3775. Database Management. (3).** Focus on designing programs written in a high-level language for business applications; selecting appropriate file organization; designing data models with electronic commerce implications; utilizing appropriate DBMS programs. PREREQUISITE: ISDS 2770.

**ISDS 3780. Application Program Development III. (3).** Advanced programming of business applications using current high level languages and techniques widely employed in business environment. PREREQUISITE: ISDS 3745, or equivalent.

**ISDS 3790. Network Design and Management. (3).** Introduction to business telecommunications concepts and terminology; decentralization of computer processing, communication links, communications-oriented hardware and software, network design, and network management. PREREQUISITE: ISDS 2770.

**ISDS 4110-19. Special Topics in Management Information Systems. (3).** Topics are varied and in online class listings. PREREQUISITE: permission of instructor.

**ISDS 4310. Global Information Technology. (3).** Technology to facilitate the practice of global business; uses of systems and technology to gain and sustain competitive advantage; cultural and political aspects of global enterprise.

**ISDS 4760. Web Site Design. (3).** Design, development, implementation and evaluation of business Web sites; global design and implementation issues. PREREQUISITE: ISDS 3745.

**ISDS 4795. End User Support: Managerial Concepts and Applications. (3).** Theory, methodology, and application tools necessary to management of end user computing environment; emphasis on management aspects of the unique environment; advanced techniques of pertinent application tools commonly found in end user environment as crucial to management of end user computing. PREREQUISITE: ISDS 3775.

**ISDS 4800. Information Resource Management. (3).** Broad overview of information systems management function with particular attention to planning, organizing and controlling user services and to managing computer information systems development process. PREREQUISITE: ISDS 3770, 3775 and 3790.

**ISDS 4910. Management Information Systems Problems. (1-3).** Approved research projects in student's major area under supervision of staff members. PREREQUISITE: senior standing and permission of department chair. (A-F, IP)

**ISDS 4911. Internship in Management Information Systems. (1-6).** Internship in business organization to gain on-the-job experience. Project approved and supervised by department faculty. Credit allowed only after acceptance of report. PREREQUISITE: have successfully completed at least 15 hours of upper division business courses with a 2.75 GPA in these courses. (A-F, IP)

**ISDS 4996. Senior Honors Thesis in Management Information Systems. (3).** Independent research open only to those students enrolled in the honors program. Thesis supervised by department faculty member. PREREQUISITE: senior standing and permission of the Director of the College Honors Program. (A-F, IP)

## (ISDS) INFORMATION SYSTEMS
### Department of Marketing and Supply Chain Management

GREGORY W. BOLLER, Ph.D., *Chair*
*Room 302, Fogelman College of Business and Economics Administration Building*

**Students must have junior standing and have met specific course prerequisites with a minimum grade of "C" (2.0) to be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of "C" (2.0) in each; (2) minimum of 2.25 GPA (2.5 for Accounting majors) in all required lower division business courses and MATH 1830, and (3) 55 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements).**

**A surcharge of $10 per credit hour for 3000 and 4000 level courses and $20 per credit hour for 6000-9000 level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).**

**ISDS 2710. Business Statistics. (3).** Introduction to basic statistical procedures for analysis and interpretation of business data; collection and presentation of data, probability theory, measures of central tendency and variability, sampling distributions, estimation of parameters, and principles of hypothesis testing; introduction to a statistical software package. PREREQUISITE: MATH 1830.

**ISDS 3510. Production and Operations Management I. (3).** Operations as a key element of organizational strategy from a competitive viewpoint; integration of various techniques to facilitate solution to productivity and quality issues in both manufacturing and service industries using multifunctional approaches in the creation of goods and services. PREREQUISITE: ISDS 3711.

**ISDS 3711. Analytical Tools for Business Decisions. (3).** Applied analytical and qualitative methods for analysis of common business decision problems; regression, math programming and optimization; forecasting, computer simulation, and decision analysis. PREREQUISITE: ISDS 2710 and 2749, or equivalent. **[C]**

**ISDS 3760. Operations Research. (3).** Introduction to decision making, concentrating on problem solving technique; emphasis on problem definition, model construction, and various solution techniques including linear programming, project analysis and control, queuing methods, and simulation. PREREQUISITE: ISDS 2749, 2755, 3711, or equivalent.

**ISDS 4510. Production and Operations Management II. (3).** Emphasis on entire production system; interface with engineering, role of materials management, relationship to data base management, and problems of systems coordination; master planning, value analysis, and organizational aspects of production environment critically examined. PREREQUISITE: ISDS 3510, MGMT 3110.

**ISDS 4511. Supply Chain Management. (3).** Competitive strategy, SCM planning, SCM design, inventory management basics, strategic sourcing; B2B relationships, performance measurement, and topical issues regarding SCM enabling technology. PREREQUISITE: ISDS 3510, MGMT 3110.

**ISDS 4512. Productivity Management. (3).** Total systems perspective toward analyzing productivity issues that affect organizational performance; importance of correctly defining and measuring productivity and supporting activities to maintain it. PREREQUISITE: ISDS 3510, or permission of instructor.

## (ITAL) ITALIAN
### Department of Foreign Languages and Literatures

RALPH ALBANESE, Ph.D., *Chair*
*Room 375, Dunn Hall*
*http://fl.memphis.edu*

**ITAL 1010. Elementary Italian I. (3). (1101).** Basic skills fundamental to language proficiency and culture. ♦

**ITAL 1020. Elementary Italian II. (3). (1102).** Further development of basic skills fundamental to language proficiency and culture. PREREQUISITE: ITAL 1010, or equivalent. ♦

**ITAL 2010. Intermediate Italian I. (3). (2201).** Comprehensive review of basic grammar, exercises in conversation, writing, and cultural readings. PREREQUISITE: ITAL 1020, or equivalent. ♦

**ITAL 2020. Intermediate Italian II. (3). (2202).** Continued development of basic language skills through oral and written practice. PREREQUISITE: ITAL 2010, or equivalent. ♦

**ITAL 3301. Conversation and Composition. (3).** Development of oral proficiency and writing skills. PREREQUISITE: ITAL 2020, or equivalent.

**ITAL 3411. Introduction to Italian Literature. (3).** Survey of major literary works from the Middle Ages to the present. PREREQUISITE: ITAL 3301, or permission of instructor.

**ITAL 4441. Dante. (3).** Study of the Vita Nuova and the Divina Commedia. Students taking this course do not receive credit for LALI 4441. PREREQUISITE: ITAL 2020, or permission of instructor.

**ITAL 4780. Individual Studies in Italian. (1-3).** Directed individual study in selected areas of Italy chosen in consultation with instructor. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor. (A-F, IP)

**ITAL 4791-99. Special Topics in Italian Literature, Language, and Civilization. (3).** Topics are varied and in online class listings. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.

## (JAPN) JAPANESE
### Department of Foreign Languages and Literatures

RALPH ALBANESE, Ph.D., *Chair*
*Room 375, Dunn Hall*
*http://fl.memphis.edu*

**JAPN 1010. Elementary Japanese I. (3). (1101).** Basic skills fundamental to language proficiency and culture. ♦

**JAPN 1020. Elementary Japanese II. (3). (1102).** Further development of basic skills fundamental to language proficiency and culture. PREREQUISITE: JAPN 1010, or equivalent. ♦

**JAPN 2010. Intermediate Japanese I. (3). (2201).** Continued development of listening, speaking, reading and writing skills. PREREQUISITE: JAPN 1020, or equivalent. ♦

**JAPN 2020. Intermediate Japanese II. (3). (2202).** Expansion of Japanese skills; extensive listening comprehension practice and readings. PREREQUISITE: JAPN 2010, or equivalent. ♦

**JAPN 3301. Conversation and Composition I. (3).** PREREQUISITE: JAPN 2020, or equivalent.

**JAPN 3302. Conversation and Composition II. (3).** PREREQUISITE: JAPN 3301, or equivalent.

**JAPN 3401. Introduction to Japanese Literature and Culture. (3).** Japanese literature and culture through a selection of important literary works written since 1900. PREREQUISITE: JAPN 3301, or equivalent.

**JAPN 4501. Japanese Linguistics. (3).** Theory and hands-on data analysis in various aspects of Japanese linguistics, including syntax, semantics, and pragmatics. PREREQUISITE: JAPN 3301, 3302, or permission of instructor.

**JAPN 4780. Individual Studies in Japanese. (1-3).** Directed individual study in selected area of Japanese chosen in consultation with instructor. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor. (A-F, IP)

## (JDST) JUDAIC STUDIES

DAVID PATTERSON, Ph.D., *Director*
*Room 301, Mitchell Hall*

**JDST 3601. Judaism. (3).** Fundamental principles of Judaism, its role in cultural life of Jewish people, its influence on human civilization.

**JDST 3661. Old Testament. (3). (4661).** Interdisciplinary examination of portions of Hebrew Bible, Mishnah, Midrash, and other texts along with commentaries. All texts will be read in translation.

**JDST 3801. Jewish Thought I. (3). (UNIV 3801).** Thinkers and texts that shaped Jewish thought and life in ancient and medieval times; Talmud, the Midrash, the Kabbalah, and such thinkers as Saadia Gaon, Solomon ibn Gabriel, Judah Halevi, Maiminides.

**JDST 3802. Jewish Thought II. (3).** Continuation of JDST 3801, from 16th century until modern times; concepts of God, humanity, nature, good and evil, making meaning out of life, and others.

**JDST 4511. Holocaust Studies. (3). (Same as UNHP 4404, UNIV 4511).** Interdisciplinary study of issues that arise out of the Holocaust; questions of good and evil, divinity and humanity, truth and responsibility. **[W, I]**

**JDST 4671. Jewish Literary Texts. (3). (Same as LALI 4671).** Development of Jewish narrative traditions; Jewish poetry, fiction, drama studied from perspectives of different national cultures in which Jewish literature has emerged. All texts will be read in translation.

**JDST 4700-4799. Special Topics. (1-3).** Topics are varied and in online class listings.

**JDST 4801. Jewish Mysticism. (3).** Fundamental principles of Jewish mystical tradition and development of basic concepts; medieval mysticism; Kabbalah, Lurianic mysticism, Chasidism, modern mystical movements.

**JDST 4820. Political History of Israel. (3). (Same as POLS 4820).** Interdisciplinary study of political stages in development of the State of Israel form mid 19th century to present time; key figures in the Zionist movement.

**JDST 4830. Israeli/Arab Conflict. (3). (Same as UNIV 4830).** Historical, political, cultural dimensions of tensions that have existed between Israelis and Arabs since the founding of the State of Israel with attention to current situation.

**JDST 4840-6840. Israel: Antiquity in Modernity. (3). (Same as ANTH 4840).** Interdisciplinary examination of relationship between ancient traditions and modern issues in Israel; emphasis on relationship between historical conditions, conflicts, and interconnections, and new choices facing Israel.

**JDST 4841-6841. Biblical Archaeology. (3). (Same as ANTH 4841).** Relationship between historical texts in Hebrew Bible and historical evidence from archaeological research in Israel and surrounding area; emphasis on how archaeological evidence and biblical narratives illuminate each other.

**JDST 4900. Independent Study. (3).** Directed individual study or research. May be repeated once. PREREQUISITE: completion of out-of-class learning contract and approval of Director of Bornblum Judaic Studies. (A-F, IP)

## (JOUR) JOURNALISM

JAMES W. REDMOND, Ph.D., *Chair*
*Room 300, Edward J. Meeman Journalism Building*

**JOUR 1700. Survey of Mass Communication. (3).** Social background, scope, functions, and organization of modern communication media, attention to all major mass communication media; philosophy and goals of modern journalism; impact on governmental, social and economic systems.

**JOUR 2121. Media Writing. (3).** Basic instruction in journalistic forms and style; use of computer in composition of news reports or articles and in solution of news writing problems; laboratory writing exercises on computer. *One lecture hour, four laboratory hours per week.* PREREQUISITE: passing grade on the Journalism Department's Writing Proficiency Exam.

**JOUR 2123. Editing. (3).** Practice in headline writing, editing, and newspaper makeup and study of contemporary editing problems. PREREQUISITE: JOUR 2121.

**JOUR 3120. Reporting. (3).** Gathering news of university community with laboratory writing assignments. PREREQUISITE: News Editorial students, JOUR 2121 and JOUR 2131; all other students, JOUR 2121.

**JOUR 3130. Feature Writing for Newspapers and Magazines. (3).** Advanced practice in writing and publishing feature stories for both magazines and newspapers; finding and developing publishable ideas; freelance techniques; advanced reporting skills; writing techniques with emphasis on leads, endings, description and effective use of anecdotes and quotations. Critiques of student work. PREREQUISITE: News Editorial students, JOUR 2121, 2123, and 3120; all other students: JOUR 2121.

**JOUR 3300. Survey of Advertising. (3).** Exploration of creative function of advertising; emphasis on role of media.

**JOUR 3324. Advertising Copy Writing and Layout. (3).** Principles of advertising psychology in relation to proven techniques for writing effective copy; approximately half of course devoted to practice in writing copy and preparing rough layouts. Typing proficiency required. *One lecture hour, four laboratory hours per week.* PREREQUISITE: JOUR 2121, 3900, or permission of instructor.

**JOUR 3345. Advertising Research. (3).** Fundamentals in advertising research; nature of the market, appropriate advertising strategies, message effectiveness and media audiences; primary and secondary research, sampling, questionnaire design, survey, and data processing and analysis. PREREQUISITE: JOUR 3300. **[C]**

**JOUR 3400. Introduction to Public Relations. (3).** Development, scope, and modern role of public relations; emphasis on problem solving, lectures, and application of major public relations tools and practices.

**JOUR 3410. Public Relations Research. (3).** Identifying, characterizing and evaluating stakeholder groups and alternative channels of communication; formal research procedures include sampling, instrument design, information gathering, data processing, analysis and reporting. **[C]**

**JOUR 3421. Public Relations Writing. (3).** Emphasis on communication tactics; plan, write, and produce public relations tools; audience and media selection; print and electronic media. *Two lectures hours, two laboratory hours per week.* PREREQUISITE: JOUR 2121; JOUR 3400 recommended. **[W]**

**JOUR 3526. Digital Imagery in Journalism. (3).** Story construction and reinforcement utilizing digital imaging elements including selection, editing, ethics, and story reinforcement in journalism publications including print, desk-top, and electronic media. *One lecture hour, four laboratory hours per week.* PREREQUISITE: JOUR 2121.

**JOUR 3625. Radio and Television News Writing and Editing. (3).** Processing of news for radio and television; attention to present-day style used by electronic media. *Two lecture hours, two laboratory hours per week.* PREREQUISITE: JOUR 2121 and 3120.

**JOUR 3649. Radio News Practicum. (3).** Applied skills in producing, writing, reporting, and voicing daily news and information programming for campus radio station WUMR. *One lecture hour, four laboratory hours per week.* May be repeated for a maximum of 6 hours credit. PREREQUISITE: JOUR 3625, or permission of instructor. (S/U).

**JOUR 3800. Journalism Seminar. (1).** Weekly presentation by media professionals on topics in their fields of journalistic expertise. Students prepare for discussion sessions through assigned readings. May be repeated for a maximum of 2 hours credit. PREREQUISITE: junior standing and permission of instructor.

**JOUR 3900. Desktop Journalism. (3).** Computer design and production of printed materials using desktop publishing software to create simple fliers, brochures and newsletters. *One lecture hour, four laboratory hours per week.*

**JOUR 4120-6120. Reporting Public Issues. (3).** Analyzing and writing news reports about government, courts, energy, economy, taxes, education, environment, medicine and science; relationship between current issues and public's need to be informed; emphasis on topics vital to large urban society. PREREQUISITE: JOUR 3120 or 3625. **[W]**

**JOUR 4124-6124. Computer-Assisted Reporting. (3).** Advanced use of computer technology and investigative techniques to access, analyze and develop database information in combination with traditional news reporting. PREREQUISITE: JOUR 3120.

**JOUR 4130. Writing Internship. (3).** Work in practical assignments at local media under supervision of qualified practitioners. NOTE: students who have received credit for JOUR 4330, 4430 or 4630 may not receive credit for JOUR 4130. PREREQUISITE: permission of sequence coordinator. (S/U).

**JOUR 4140-6140. Publication Design and Production. (3).** Basic principles of layout and production for newspapers and magazines, including typography, story selection, page creation and graphics; copy, images, infographics; headlines, titles, subheads, captions. PREREQUISITE: JOUR 3130 and 3526.

**JOUR 4327. Media Planning. (3).** Procedures for analyzing the advertising situation, writing advertising and media goals, and setting advertising appropriations; use of a microcomputer program to develop and evaluate optimum advertising media schedules. PREREQUISITE: JOUR 3300 and MKTG 3010. **(F).**

**JOUR 4328-6328. Strategic Advertising Campaigns. (3).** Development of creative strategy and its execution to include layouts, audio tapes, slide shows, story boards and sales promotion application. PREREQUISITE: JOUR 3324, 3345, 4327. **[W, I] (Sp).**

**JOUR 4330. Advertising Internship. (3).** Work under supervision of qualified practitioners in local advertising agency; advertising department of newspaper, television, or radio station; or company advertising department. NOTE: students who have received credit for JOUR 4130, 4430 or 4630 may not receive credit for JOUR 4330. PREREQUISITE: permission of sequence coordinator. (S/U).

**JOUR 4420. Public Relations Case Studies. (3).** Case studies and Typical public relations problems; planning and preparation of communications materials for various media; application of public relations techniques. PREREQUISITE: JOUR 3410 recommended.

**JOUR 4430. Public Relations Internship. (3).** Work experience as intern with public relations department or organization or on team project assigned by instructor; analysis of public relations plan and evaluation of results. NOTE: students who have received credit for JOUR 4130, 4330 or 4630 may not receive credit for JOUR 4430. PREREQUISITE: JOUR 3400, 3410 and 3421, and permission of sequence coordinator. (S/U).

**JOUR 4440-6440. Public Relations Campaigns. (3).** Application of theory, research data, and problem-solving techniques in the development of comprehensive public relations strategies. PREREQUISITE: JOUR 3400, 3410, 3421; JOUR 4420 recommended. **[I]**

**JOUR 4500-6500. Mass Media Website Management I . (3).** Creation of journalism/mass media organization World Wide Web sites including conceptualization, layout, and integration of traditional news and information products; theoretical and ethical issues involving mass media publishing content on the Internet including concepts of product placement and audience engagement with news, public relations, and advertising.

**JOUR 4550. Mass Media Web Site Management II. (3).** Advanced techniques in design, creation and maintenance of mass media web sites; advanced software practices and skills; complex web programming, interface design, information architecture and web multimedia. PREREQUISITE: JOUR 4500, or permission of instructor.

**JOUR 4629. Electronic Reporting. (3).** Gathering and writing of news for all electronic media (radio-TV-cable); emphasis on fundamentals of reporting and audio-video electronic news gathering. PREREQUISITE: JOUR 3625, COMM 3801.

**JOUR 4630. Broadcast News Internship. (3).** Work in practical assignments at local broadcast media under supervision of qualified practitioners. NOTE: Students who have received credit for JOUR 4130, 4330 or 4430 may not receive credit for JOUR 4630. PREREQUISITE: permission of sequence coordinator. (S/U).

**JOUR 4639. Television Newsroom Production. (3).** Producing, writing, editing and using electronic equipment to assemble a television newscast; emphasis on performing the various tasks in a working newsroom. PREREQUISITE: JOUR 3625, COMM 3801, or permission of instructor.

**JOUR 4649. Television News Practicum. (3).** Applied skills in producing, writing, reporting, voicing daily news and information programming for a television newscast. *One lecture hour, four laboratory hours per week.* May be repeated for a maximum of 6 hours credit. PREREQUISITE: JOUR 3625, and permission of instructor. (S/U).

**JOUR 4655-6655. Seminar In Electronic Media. (3).** An examination of issues and problems confronting electronic media, analysis of the various professional, societal and economic forces that affect broadcast journalism.

**JOUR 4700. Mass Communication Law. (3).** Origin and development of legal principles affecting freedom of expression and provisions of laws of libel, slander, copyright, and other statutes limiting communication in fields of publishing and broadcasting.

**JOUR 4702-6702. Current Issues In Journalism. (3).** Advanced study of recent, critical problems faced by mass media and complexities that cause them. **[I]**

**JOUR 4708-6708. Mass Media Professional Ethics. (3).** Classical approaches to ethics presented with their application to the day-to-day considerations journalism, public relations and advertising professionals must face in working with employers, local publics and the larger society which depend on the free flow of accurate information. **[I]**

**JOUR 4712-6712. Mass Media and Cultures. (3).** Designed for the professional communicator who needs to understand different cultures, both foreign and domestic; intercultural communication, comparison of cultural values and behaviors, the nature of news in different cultures, the international flow of news, growth and impact of global journalism, television, advertising, and public relations.

**JOUR 4714. Information Retrieval and Analysis. (3). (3712).** Using computers to develop and execute search strategies in multiple on-line databases; critical analysis, webmastering, and archiving of collected information.

**JOUR 4716-6716. History of Journalism. (3). (3700).** Origin and development of U.S. mass communication. PREREQUISITE: HIST 2010 and 2020, or equivalent.

**JOUR 4800-09-6800-09. Special Topics in Journalism. (3).** Intensive study of a single critical issue or current topic Topics are varied and in online class listings. May be repeated for a maximum of 6 hours credit.

**JOUR 4830. Directed Individual Study. (1-3).** Independent study and research, or practicum, or project under supervision. May be repeated for a maximum of 3 hours credit. PREREQUISITE: permission of instructor. (A-F, IP)

**JOUR 4900-6900. Desktop Presentation. (3).** Using computers to learn processes/software/production design concepts involved in multimedia primarily designed for computer-to-computer communication; digital editing of still images, off-line video editing, animation and production techniques for assembling all into a single CD or video to convey advertising, public relations, or news editorial concepts. PREREQUISITE: JOUR 3900, or permission of instructor.

## (LALI) LANGUAGES AND LITERATURE

### Department of Foreign Languages and Literatures

RALPH ALBANESE, Ph.D., *Chair*
*Room 375, Dunn Hall*
*http://fl.memphis.edu*

**LALI 1010. Special Studies in Foreign Languages I. (3) (1701).** Freshman-level instruction in languages not regularly offered by Department of Foreign Languages; offered if and when sufficient demand exists and instructors available. Although credit earned in LALI 1020-2020 may be used to satisfy foreign language requirements for degrees, students should be aware of two important points: (1) foreign language requirement for degrees in College of Arts and Sciences specifies that all hours must be in same language; (2) unless demand is sufficient and unless instructors are available, the University cannot offer enough courses to enable students to meet these requirements.

**LALI 1020. Special Studies in Foreign Languages II. (3) (1702).** Continuation of LALI 1010. Freshman-level instruction in languages not regularly offered by Department of Foreign Languages; offered if and when sufficient demand exists and instructors available.

**LALI 2010. Intermediate Studies in Foreign Languages I. (3) (2701).** Continuation of LALI 1010 and 1020. Offered provided instructor is available and there is sufficient student enrollment.

**LALI 2020. Intermediate Studies in Foreign Languages II. (3) (2702).** Continuation of LALI 2010. Offered provided instructor is available and there is sufficient student enrollment.

**NOTE:** LALI literature courses may not be used to satisfy any part of the foreign language requirement. With the exception of LALI 4890 (Literary Criticism), LALI literature courses do not apply toward a major or minor in any of the foreign languages.

**NOTE:** Courses in Greek and Roman literature in translation and mythology are listed under Classics.

**LALI 3401. Introduction to Chinese Literature and Culture. (3).** Chinese literature and culture from their origins to the present.

**LALI 3661. Old Testament. (3). (4661). (Same as JDST 3661).** Disciplines of history, philosophy, literature, religion, and culture; understanding the meanings, messages, and world views contained in sacred Hebrew texts.

**LALI 4010-29-6010-29. Special Topics in Foreign Literatures. (3).** Topics are varied and in online class listings.

**LALI 4301. Modern Chinese Literature in Translation. (3).** Reading of major writers and works of 20th century Chinese literature in English translation.

**LALI 4441-6441. Dante. (3).** Study of the Vita Nuova and the Divine Comedy in English translation.

**LALI 4442. Italian Cinema from 1945 to Present. (3).** Screening, discussion of major contemporary Italian movies in context of late 20th century Italian culture and society.

**LALI 4493-6493. Contemporary French Literature. (3).** Emphasis on widely translated, well-known works by major French writers; presented in English translation. **[W]**

**LALI 4494. Nineteenth-Century Russian Literature in Translation. (3).** Introduction to major literary works written in Russia during nineteenth century.

**LALI 4671. Jewish Literary Texts. (3). (Same as JDST 4671).** Narrative tradition in Jewish cultures throughout history; development of Jewish literary texts in modern times; selections from the modern period include fiction, poetry, and drama.

**LALI 4780. Individual Studies in Language and Literature. (1-3).** Directed individual study in selected areas of language or literature chosen in consultation with instructor. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.

**LALI 4791-99. Special Topics in Foreign Literature, Language, or Civilization. (3).** May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.

**LALI 4890-6890. Literary Criticism. (3).** Study of the history and theory of literary criticism from Antiquity to the present as exemplified by texts selected from various European and non-European literary traditions. **[W,I]**

## (LATN) LATIN

### Department of Foreign Languages and Literatures

RALPH ALBANESE, Ph.D., *Chair*
*Room 375, Dunn Hall*
*http://fl.memphis.edu*

**LATN 1010. Elementary Latin I. (3). (1101).** Elements of grammar; practice in Latin composition and translation. ♦

**LATN 1020. Elementary Latin II. (3). (1102).** Completion of elementary Latin grammar, with additional readings. PREREQUISITE: LATN 1010, or equivalent college level credit. ♦

**LATN 2201. Intermediate Latin I. (3). (2201).** Review of basic Latin grammar with reading selections from The Golden Fleece and Roman history. PREREQUISITE: LATN 1020, or the equivalent. ♦

**LATN 2202. Intermediate Latin II. (3). (2202).** More advanced readings from major authors. PREREQUISITE: LATN 2010, or equivalent. ♦

**LATN 3111. Roman Historians. (3).** Readings and analysis of selections from Caesar, Livy, Tacitus, and Suetonius; emphasis on nature of Roman historiography. PREREQUISITE: LATN 2020.

**LATN 3211. Vergil. (3).** Reading and analysis of the Aeneid. PREREQUISITE: LATN 2020.

**LATN 3912. Cicero. (3).** Reading and analysis of De Amicitia and De Senectute. PREREQUISITE: LATN 2020.

**LATN 4001. Latin Prose. (3).** Reading, interpretation of original texts of one or more Latin prose authors; language, structure and content. May be repeated for a maximum of 9 hours credit. PREREQUISITE: LATN 2020.

**LATN 4002. Latin Poetry. (3).** Reading, interpretation of original texts of one or more major Latin poets; language, structure and context. May be repeated for a maximum of 9 hours credit. PREREQUISITE: LATN 2020.

**LATN 4411. Roman Letter Writers. (3).** Reading and analysis of Cicero's Letters. PREREQUISITE: LATN 2020.

**LATN 4711. Elegy, Lyric, and Epigram. (3).** Reading and analysis of selections from Catullus, Horace, Tibellus, Propertius, and Martial. PREREQUISITE: LATN 2020.

## (LBRY) UNIVERSITY OF MEMPHIS LIBRARIES

SYLVERNA V. FORD, Ph.D., *Dean*
*Room 203, McWherter Library*

**LBRY 3900-09. Special Topics in Library Information. (3).** Topics are varied and in online class listings. May be repeated when topic varies.

## (LEAD) LEADERSHIP

LARRY McNEAL, Ph.D., *Chair*
*Room 123, Ball Hall*
*http://coe.memphis.edu/lead*

The Department of Leadership offers only graduate level degree programs but does provide courses as part of undergraduate degree programs offered by other departments in the college and University.

**LEAD 2010. Teaching and Schools in Urban Settings. (3).** Introduction to roles and responsibilities of teachers in urban school settings; evolution of educational policies and practices; organization and structure of schools; examination of schools as cultural systems; philosophical, historical, and legal approaches. *Five hours of field experience.* PREREQUISITE: sophomore standing.

**LEAD 3350. The Adult Learner. (3). (EDSV 3350).** Variety of learning patterns and developmental characteristics of adult emphasis on applications in programs or other activities for adult learners.

**LEAD 4000-6000. Foundational Studies: Education, Schooling and American Society. (3).** Interdisciplinary study of educational policies and practices in American society; role and function of school and teachers; analysis of major problems and issues facing contemporary public education. *Five hours of school visitation required.* PREREQUISITE: upper division standing, or bachelor's degree.

**LEAD 4400-6400. Leadership and Reform in American Schools. (3).** Concepts of leadership in reform context of contemporary social and educational policy; examination of major legal, political, economic, organizational, and philosophical issues; role of teacher-leader explored. PREREQUISITE: senior standing and LEAD 2010.

## (LEGL) PARALEGAL STUDIES

BRODERICK NICHOLS, J.D., *Assistant Dean for Undergraduate Programs*
*Room G-1, Johnson Hall*

**LEGL 2400. Legal Ethics. (3). (UNIV 2400).** Introduction to paralegal profession; organization of legal institutions; role of attorneys and paralegals in legal system; regulation, ethics, and professional responsibility. PREREQUSITE: ENGL 1010.

**LEGL 2410. Introduction to Law. (3). (UNIV 2410).** Introduction to American substantive and procedural law; origins and applications of legal theories and processes; case law analysis. PREREQUISITE: ENGL 1010.

**LEGL 2420. Legal Research and Writing I. (3). (UNIV 2420).** Research methods using legal encyclopedias, annotations, form books, reporters, codes, regulations, digests, and citators; style of legal memorandum and uniform citation. PREREQUISITE: ENGL 1010.

**LEGL 3410. Contracts and Commercial Law. (3). (UNIV 3410).** Survey of law affecting the formation, performance, and enforcement of contracts; the Uniform Commercial Code; consumer protection; debtor-creditor relations; bankruptcy; emphasis on paralegal's role in contract and commercial cases. PREREQUISITE: LEGL 2400, 2410, 2420.

**LEGL 3420. Torts. (3). (UNIV 3420).** Survey of state and federal law treating civil injury to persons or property; common law and statutory torts, worker's compensation, and insurance; emphasis on paralegal's role in preparing personal injury and compensation cases. PREREQUISITE: LEGL 2400, 2410, 2420.

**LEGL 3430. Business Associations. (3). (UNIV 3430).** Legal aspects of formation and operation of proprietorships, agencies, partnerships, and corporations; emphasis on paralegal's role in drafting business documents and maintaining corporate records. PREREQUISITE: LEGL 2400, 2410, 2420.

**LEGL 3440. Civil Procedure. (3). (UNIV 3440).** Application of Rules of Civil Procedure to civil litigation in federal and state courts; jurisdiction; pleadings; discovery requests; trial and appellate practices; judgments; emphasis on paralegal's role in civil litigation. PREREQUISITE: LEGL 2400, 2410, 2420.

**LEGL 3450. Legal Research and Writing. II. (3). (UNIV 3450).** Advanced study of legal research and writing methods; computerized legal research; format and style of trial memorandum and appellate brief. PREREQUISITE: 15 hours in LEGL paralegal courses including LEGL 2420. **[W]**

**LEGL 3481. Family Law. (3). (UNIV 3481).** Substantive and procedural law affecting the family; marriage; procreation; divorce; child custody and support; emphasis on Tennessee law and paralegal's role in family cases. PREREQUISITE: LEGL 2400, 2410, 2420.

**LEGL 3482. Labor Law. (3). (UNIV 3482).** Law affecting employment relations; NLRB and EEOC procedures; OSHA and ADA issues in the workplace; emphasis on paralegal's role in labor law cases. PREREQUISITE: LEGL 2400, 2410, 2420.

**LEGL 3483. Computers in the Law. (3). (UNIV 3483).** Detailed examination of practical, technical, and theoretical aspects of computer systems as applied in the modern law office; includes docket control, billing, communications, litigation support, and legal document production. PREREQUISITE: ISDS 2749.

**LEGL 3484. Bankruptcy Practices. (3). (UNIV 3484).** Intensive study of substantive and procedural law of bankruptcy; emphasis on applications and processes used by the paralegal when assisting in bankruptcy cases. PREREQUISITE: LEGL 2400, 2410, 2420.

**LEGL 3485. Real Estate Practices. (3). (UNIV 3485).** Substantive law of real property; acquisitions, characteristics, and transfer of interests in real estate; particular emphasis on the role of paralegals assisting real estate attorneys with realty transfers and closings in Shelby County, Tennessee. PREREQUISITE: LEGL 2400, 2410, 2420.

**LEGL 3486. Criminal Law and Procedure. (3).** Advanced approach to understanding substantive and procedural criminal law with emphasis on practical application; prima facie elements of substantive criminal offenses, defenses to specific crimes, constitutional limits on police and other governmental entities, probation and parole, and the juvenile justice system. PREREQUISITE: LEGL 2400, 2410, 2420.

**LEGL 3487. Administrative Law and Procedure. (3).** Advanced approach to understanding substantive administrative law; in-depth analysis of Administrative Procedure Act; agency rulemaking, investigations, due process, informal action and discretion, formal adjudications, judicial review.

**LEGL 4410. Paralegal Internship. (3).** Supervised work experience in appropriate legal setting; individual progress conferences arranged and evaluative reports developed. PREREQUISITE: LEGL 2420, 3450 and approval of paralegal internship contract. (S/U).

**LEGL 4450. Legal Research and Writing III. (3).** Advanced legal research and writing involving development of offensive and defensive litigation strategies and preparation of state and federal trial court pleadings which utilize these strategies; survey of appellate process and preparation of appellant and appellee briefs. PREREQUISITE: LEGL 2420, 3450.

## (MATH) MATHEMATICS

### Department of Mathematical Sciences

JAMES E. JAMISON, Ph.D., *Chair*
*Room 373, Dunn Hall*

*http://www.msci.memphis.edu/*

**MATH 0990. Foundations of Geometry. (3).** Axiomatic development of plane geometry; emphasis on concepts of symmetry, congruence and similarity, Pythagorean Theorem and special right triangle properties, area and volumes of special right triangle properties; area and volumes of special two- and three-dimensional figures. NOTE: Hours earned will not apply toward any degree. PREREQUISITE: two units of high school algebra, or DSPM 0850.

**MATH 1410. Foundations of Mathematics I. (3). (1181).** Introduction to logic; set theory: development and applications of numeration systems, mathematical systems and algorithms. PREREQUISITE: two units of high school algebra, or DSPM 0850. **[G]** ♦

**MATH 1420. Foundations of Mathematics II. (3). (1182).** Algebra review and applications; functions, graphs, permutations, combinations, introduction to probability and statistics; problem solving. PREREQUISITE: MATH 1410. **[G]** ♦

**MATH 1421. Honors Calculus I. (4). (1401).** Concepts of differential calculus with emphasis on theory; limits, continuous functions, applications of the derivative. NOTE: students may not receive credit for both MATH 1421 and MATH 1910. PREREQUISITE: permission of instructor.

**MATH 1710. College Algebra. (3). (1211).** Analysis of functions (linear, quadratic, polynomial, root, rational, exponential, logarithmic) using graphing calculators; partial fractions; synthetic division; conic sections; theory of equations; inequalities; applications. NOTE: only one of MATH 1710 or MATH 1730 may be used to satisfy degree requirements. PREREQUISITE: two years of high school algebra, or DSPM 0850.

**MATH 1720. Trigonometry. (3). (1212).** Circular functions; inverse circular functions, graphs of circular and inverse functions, identities, equations, angles, trigonometric functions, solution of triangles, elementary application of vectors; trigonometric form of complex numbers. NOTE: MATH 1720 and MATH 1730 will not satisfy a six semester hour degree requirement. PREREQUISITE: placement test recommended but not required; MATH 1710.

**MATH 1730. College Algebra and Trigonometry. (4). (1213).** Exponents, radicals, quadratic functions, inequalities; relations and functions; inverse, exponential and logarithmic functions; solution of algebraic systems; trigonometric functions, identities, equations and graphs; angle measurements; sum, difference, half-angle and double-angle formulas; solution of triangles, laws of sines and cosines. NOTE: MATH 1710 and 1730, or 1720 and 1730 will not satisfy a six semester hour degree requirement. PREREQUISITE: two units of high school algebra, or DSPM 0850.

**MATH 1830. Elementary Calculus. (3). (1312).** Introduction to concepts and methods of elementary calculus of one real variable as related to rational, exponential, and logarithmic functions; nature of derivatives; differentiation; application of derivative; nature of integration: definite integral; applications of definite integral. NOTE: only one of MATH 1830 or 1910 may be used to satisfy degree requirements. PREREQUISITE: MATH 1710. **[G]** ♦

**MATH 1910. Calculus I. (4). (1321).** Introduction to calculus of one real variable; limits; continuity; derivatives; applications of derivatives including Newton's method, graphing techniques, optimization, indeterminate forms and l'Hospital's rule; antiderivatives; includes transcendental functions. NOTE: only one of MATH 1830 or MATH 1910 may be used to satisfy degree requirements. Students may not receive credit for both MATH 1910 and MATH 1421. PREREQUISITE: MATH 1720 or MATH 1730. **[G]** ♦

**MATH 1920. Calculus II. (4). (2321).** Integration and applications of the definite integral; techniques of integration and improper integrals; curves defined by Parametric equations; arc length and surface area; polar coordinates; infinite series, Taylor and McLaurin series. NOTE: students may not receive credit for both MATH 1920 and MATH 2421. PREREQUISITE: MATH 1910.

**MATH 2000. Experiences in Mathematics. (3).** Introduction to selected areas of mathematical sciences through application to modeling and solution of problems involving networks, circuits, trees, linear programming, random samples, regression, probability, inference, voting systems, game theory symmetry and tilings, geometric growth, conics, comparison of algorithms, codes and data management. PREREQUISITE: three years of high school mathematics, including two years of algebra and one year of geometry. **[G]** ♦

**MATH 2011-2020. Special Topics in Mathematics. (1-3).** Topics are varied and in online class listings. PREREQUISITE: permission of instructor.

**MATH 2110. Calculus III. (4). (2322).** Multivariable calculus including three-dimensional analytic geometry and vectors, quadratic surfaces, arc length and curvature, limits and continuity, partial derivatives and their applications, tangent planes, optimization problems and Lagrange multipliers, multiple integrals, vector fields, line and surface integrals, Green's theorem, Stokes' theorem, the divergence theorem. PREREQUISITE: MATH 1920.

**MATH 2421. Honors Calculus II. (4). (1402).** Differential and integral calculus with emphasis on theory; anti-derivatives, definite integrals, techniques of integration, sequences, and series. NOTE: students may not receive credit for both MATH 2421 and MATH 1920. PREREQUISITE: MATH 1421 or MATH 1920, and permission of instructor.

**MATH 2422. Honors Calculus III. (4).** Multivariable calculus; vectors and matrices, partial derivative and applications, multiple integrals, line and surface integrals, Green's and Stokes' theorem. NOTE: students may not receive credit for both MATH 2422 and MATH 2110. PREREQUISITE: MATH 2421.

**MATH 2701. Discrete Structures. (3).** Elementary logic; sets, relations, functions, orderings, equivalence relations, partitions: finite sets, modular arithmetic; natural numbers, mathematical induction, strings, string programs, connectedness, traversals, graph algorithms. NOTE: students may not receive credit for both MATH 2701 and MATH 2702. PREREQUISITE: MATH 1910.

**MATH 2702. Introduction to Proofs and Fundamentals of Mathematics. (3).** Logic, algebra of sets; forms of proof including mathematical induction; elementary combinatorics and binomial theorem; paradoxes, basic number theory, cardinality. PREREQUISITE: MATH 1910.

**MATH 3120. Differential Equations. (3). (3391).** Ordinary differential equations including series solutions. PREREQUISITE: MATH 2110.

**MATH 3221. Elementary Number Theory. (3).** Divisibility properties of integers; prime numbers; congruences; Diophantine equations; quadratic residues; number theoretic functions; Fermat's theorem and Euler's generalization; applications to cryptography; quadratic reciprocity law. PREREQUISITE: MATH 3242, or one of MATH 2701, MATH 2702, or permission of instructor.

**MATH 3242. Introduction to Linear Algebra. (3).** Systems of linear equations, matrices, elementary row operations, determinants; vector spaces and subspaces; linear transformations. PREREQUISITE: MATH 2110, or MATH 1920 and one of MATH 2701, MATH 2702, or permission of instructor. [C]

**MATH 3402. Honors Mathematics IV. (4).** Linear algebra and differential equations; vector spaces, bases, linear transformations, matrices, first and second order ordinary differential equations, systems, phase plane methods. NOTE: students with credit for this course cannot receive credit for MATH 3242 or MATH 3120. PREREQUISITE: MATH 2422.

**MATH 3581. College Geometry. (3).** Axiomatic systems; major results from plane geometry; affine, projective, elliptic, hyperbolic geometry; applications of differential calculus. PREREQUISITE: MATH 1910 and 2702.

**MATH 4010-19-6010-19. Special Topics in Mathematics and Statistics. (1-3).** Topics are varied and in online class listings. PREREQUISITE: permission of instructor.

**MATH 4151-6151. History of Mathematics. (3).** Development of mathematics from earliest times to present; problem studies; parallel reading and class reports. PREREQUISITE: 21 hours in MATH courses including MATH 2110 and one of MATH 2701, MATH 2702, or permission of instructor. **[I]**

**MATH 4171-6171. Special Problems In Mathematics. (1-3).** Directed individual study in selected area of mathematics chosen in consultation with instructor. May be repeated with permission of department chair. PREREQUISITE: permission of instructor. (A-F, IP)

**MATH 4240-6240. Matrix Algebra. (3).** Elementary operations, special classes of matrices, determinants, eigenvalues and eigenvectors, canonical forms, and elementary computer implementation. NOTE: credit may not be obtained for both MATH 3242 and MATH 4240. PREREQUISITE: knowledge of Fortran and MATH 1910 or 1830.

**MATH 4242-6242. Linear Algebra. (3).** Linear transformations, polynomials, determinants, direct-sum decompositions, diagonalizable operators, rational and Jordan forms, inner product spaces, the spectral theorem. PREREQUISITE: MATH 3242.

**MATH 4261-6261. Abstract Algebra. (3).** Groups; homomorphisms; rings; integral domains; polynomials; fields. PREREQUISITE: MATH 2702 and 3242, or permission of instructor.

**MATH 4350-6350. Introduction to Real Analysis I. (3).** Real number system, functions and sequences, limits, continuity, differentiation; Riemann-Stieltjes integration, series of functions. PREREQUISITE: MATH 2110, 2702 and permission of instructor. **[W]**

**MATH 4351-6351. Introduction to Real Analysis II. (3).** Integration theory; Riemann and Lebesgue integrals; partial differentiation, implicit function theorem. PREREQUISITE: MATH 4350, or permission of instructor.

**MATH 4361-6361. Complex Variables. (3).** Complex numbers; analytic functions; Cauchy-Riemann conditions; Taylor and Laurent series; integration. PREREQUISITE: MATH 2110.

**MATH 4391-6391. Partial Differential Equations I. (3).** Laplace transforms; Fourier series; introduction to partial differential equations. PREREQUISITE: MATH 3120.

**MATH 4392-6392. Partial Differential Equations II. (3).** Methods of characteristics; Green's functions; existence and regularity of solutions of boundary value; Cauchy problems. PREREQUISITE: MATH 4391.

**MATH 4402. Senior Honors Seminar. (3).** In-depth study of one or more topics in mathematical sciences; emphasis on individual research and problem solving techniques; student writes and presents an Honors Thesis. PREREQUISITE: open only to senior Honors Students in mathematical sciences with permission of instructor.

**MATH 4411-6411. Topology. (3).** Introductory set theory; metric spaces; topological spaces; continuous functions; separation axioms; separability and countability axioms; connectedness and compactness. PREREQUISITE: MATH 2702 and one of MATH 3242 or MATH 4350.

**MATH 4721-6721. Numerical Analysis. (3).** Derivation and application of computer-oriented, numerical methods for functional approximation, differentiation, quadrature, and solution of ordinary differential equations. PREREQUISITE: MATH 1920 and knowledge of some structured programming language.

## (MATH) STATISTICS

### Department of Mathematical Sciences

JAMES E. JAMISON, Ph.D., *Chair*
*Room 373, Dunn Hall*
*http://www.msci.memphis.edu/*

**MATH 1601. Statistical Reasoning. (3).** Introduction to statistics, probability and their applications; probability models; Mendel's models in genetics; normal approximation; importance of randomization and blocking; double blind experiments; the Gallop poll; measurements error; correlation and regression analysis; tests of significance. NOTE: MATH majors may not use this course as part of the major. PREREQUISITE: two years of high school algebra, or DSPM 0850.

**MATH 4607-6607. Introduction to SAS Programming. (3).** SAS program statement syntax and flow control; selecting and summarizing observations; combing, dividing and updating SAS dataset; input tailoring and output customization; SAS built-in functions SAS Macro Language Programming and other SAS packages such as SAS/GRAPH and SAS/IML. PREREQUISITE: introductory course in statistics.

**MATH 4611-6611. Introduction to Applied Statistics. (3).** Binomial, hypergeometric, Poisson, multinomial and normal distributions, test of hypotheses, chi-square test, t-test. F-test, etc, nonparametric tests; correlation analysis. Credit earned for this course may not be applied toward requirements for the Mathematical Sciences major. Students who have a calculus background are encouraged to take MATH 4635 instead of this course. PREREQUISITE: 6 hours in mathematics at level of MATH 1710 or above (except MATH 1601).

**MATH 4614-6614. Applied Probability and Queueing Theory. (3).** Probability and random variables, discrete and continuous probability distributions, stochastic processes, queueing theory, applications of probability and queueing theory to computer systems. NOTE: students may not receive credit for both MATH 4614 and MATH 4635. PREREQUISITE: MATH 1920, 2701, and COMP 1900, or its equivalent.

**MATH 4635-6635. Introduction to Probability Theory. (3).** Basic probability theory, random variables, expectation, variance, covariance, moment generating functions; binomial, hypergeometric, Poisson, geometric, negative binomial, uniform, normal, exponential, Cauchy. chi-square, t, and F distributions; central limit theorem. functions of a random variable; bivariate, marginal, and conditional distributions. NOTE: students may not receive credit for both MATH 4614 and MATH 4635. PREREQUISITE: MATH 1920.

**MATH 4637-6637. Statistical Methods. (3).** Basic concepts of hypothesis testing; comparisons of two population means, proportions, and variances; analysis of variance; completely randomized designs, randomized block designs, Latin square designs; multiple comparisons; simple linear model and multiple regression; analysis of covariance. PREREQUISITE: MATH 4611 or 4635.

**MATH 4640-6640. Introduction to Probability Models. (3).** Basic concepts of discrete Markov chains; branching processes; Poisson processes; applications to modelling of population growth; applications to modelling of spread of infectious disease. PREREQUISITE: MATH 4635.

## (MECH) MECHANICAL ENGINEERING

JOHN I. HOCHSTEIN, Ph.D., *Chair*
*Room 312A, Engineering Science Building*
*http://www.me.memphis.edu/default.htm*

Undergraduate and graduate level engineering courses require an additional $20 per credit hour.

**MECH 1307. Mechanical Engineering Computing I. (3).** Introduction to computing techniques used in engineering today; general problem solving and graphing techniques, word processing fundamentals, the World Wide Web, and introduction to elementary computer programming.

**MECH 1309. Mechanical Engineering Computing II. (3).** Introduction to computer aided engineering tools, engineering applications of spreadsheet programs, and computer aided drawing.

**MECH 1395. Honors Studies. (1).** Participation in scholarly activities such as research and design programs within the college under the supervision of a faculty mentor. Successful completion requires the mentor's acceptance of a report documenting the student's accomplishments. Note: this course is intended for students in their first year of academic study and may be repeated for a maximum of 3 hours credit. PREREQUISITE: admission to the Honors Program.

**MECH 2308. Engineering Graphics. (3).** Drafting techniques as used in engineering practice; introduction to AutoCAD. Not credited toward degree in Mechanical Engineering.

**MECH 2332. Dynamics. (3).** Kinematics and kinetics of particles and rigid bodies. PREREQUISITE: CIVL 2131. COREQUISITE: MATH 3120.

**MECH 2395. Honors Studies. (1).** Participation in scholarly activities such as research and design programs within the college under the supervision of a faculty mentor. Successful completion requires the mentor's acceptance of a report documenting the student's accomplishments. Note: this course is intended for students in their second year of academic study and may be repeated for a maximum of 3 hours credit. PREREQUISITE: admission to the Honors Program.

**MECH 3301. Engineering Analysis. (3).** Mechanical engineering applications of first and second order ordinary differential equations, Laplace transforms, and Fourier series to problems in the areas of heat transfer, vibrations, and fluid mechanics. PREREQUISITE: MATH 3120.

**MECH 3310. Introduction to Thermal Systems. (3).** Introduction to First and Second Laws of Thermodynamics and to conduction, convection, and radiation heat transfer with particular emphasis on engineering applications. Mechanical engineering majors may not use MECH 3310 to fulfill B.S.M.E. degree requirements. PREREQUISITE: MATH 2110.

**MECH 3311. Engineering Thermodynamics I. (3).** Laws of thermodynamics and their applications to engineering problems. PREREQUISITE: MATH 2110.

**MECH 3312. Engineering Thermodynamics II. (3).** Applications of thermodynamics laws; emphasis on real gases, real gas mixtures, combustion, gas cycles and vapor cycles. PREREQUISITE: MECH 3311, CHEM 1110/1111.

**MECH 3320. Engineering Materials. (3). (3361).** Nature of six main classes of materials: metals, polymers and elastomers, ceramics and glasses, semiconductors, superconductors and composites; mechanical, thermal, electrical and electronic, magnetic and optical properties of materials; environmental effects on performance of materials: creep, corrosion, oxidation; methodology for selection of materials for named applications. PREREQUISITE: CHEM 1110/1111. COREQUISITE: PHYS 2120/2121.

**MECH 3321. Kinematics and Dynamics of Machines. (3).** Velocity and acceleration analysis of linkages and mechanisms; force analysis of linkages and mechanisms and machinery such as IC engines; gyroscopic forces and moment-of-inertia determination; dynamic balance of rotors and reciprocating masses. PREREQUISITE: MECH 2332, 3341.

**MECH 3322. Mechanics of Materials. (3). (Same as CIVL 3322).** Analysis of components subjected to tension, compression, bending moment, torque; combined loading; Mohr's stress circle; deflection of beams; simple treatment of column buckling. PREREQUISITE: CIVL 2131.

**MECH 3323. Mechanical Design and Analysis. (3).** Methodology and practice in designing machine components by integrating principles from mechanics of materials, failure theory, fatigue, economics and other principles. PREREQUISITE: MECH 3322.

**MECH 3325. Materials Laboratory. (1).** Materials testing and evaluation. *Three laboratory hours per week.* PREREQUISITE: MECH 3320. PREREQUISITE or COREQUISITE: MECH 3322.

**MECH 3331. Mechanics of Fluids. (3).** Statics and dynamics of fluids; applications to measurement of properties of water and air flows. PREREQUISITE: MECH 2332.

**MECH 3335. Fluids Laboratory. (1).** Principles of fluid mechanics are demonstrated and verified; familiarization with instrumentation and techniques in organizing and reporting results of experimental investigations. *Three laboratory hours per week.* COREQUISITE: MECH 3331.

**MECH 3341. Mechanical Engineering Analysis. (3).** Engineering methods, classical analysis, computer techniques, and their interactions with mechanical engineering problems. COREQUISITE: MATH 3120. **[C]**

**MECH 3395. Honors Studies. (1).** Participation in scholarly activities such as research and design programs within the college under the supervision of a faculty mentor. Successful completion requires the mentor's acceptance of a report documenting the student's accomplishments. NOTE: this course is intended for students in their third year of academic study and may be repeated for a maximum of 3 hours credit. PREREQUISITE: admission to the Honors Program.

**MECH 4300. Senior Seminar. (1).** Ethics, professionalism, presentations. Senior survey required. FE exam is recommended. PREREQUISITE: senior status, or permission of instructor.

**MECH 4305-6305. Intermediate Fluid Mechanics. (3).** Continuation of MECH 3331; introduction to various topics in advanced fluid mechanics, including: flow over immersed bodies; open channel hydraulics; compressible fluid flow; turbomachinery; measurements in fluid mechanics; and, inviscid flow. PREREQUISITE: MECH 3331.

**MECH 4309-6309. Gas Dynamics. (3).** Concepts in compressible flow, emphasis on real and ideal gas dynamic effects and non-equilibrium flow; application of numerical methods. PREREQUISITE: MECH 3312, 3331.

**MECH 4311. Heat Transfer I. (3).** Fundamentals of conduction, convection, and radiation heat transfer with emphasis on conduction and convection; introduction to heat exchanger design. PREREQUISITE: MECH 3331, 3341.

**MECH 4312. Power Generation. (3).** Application of thermodynamics, fluid mechanics and heat transfer to design and operation of power plants; economic operation of power generation, optimization of resources, and technical report writing. PREREQUISITE: MECH 3312. **[W]**

**MECH 4313-6313. Heat Transfer II. (3).** Principles of boiling, condensing, and radiation heat transfer; fundamentals of heat exchanger design. PREREQUISITE: MECH 4311.

**MECH 4314. Fluid/Thermal Systems Designs. (4).** Design of piping systems; pipe size selection using economics; fluid meter selection; prime movers and piping systems; heat exchanger analysis, selection and design; economics of heat exchanger selection; analysis of fluid/thermal components as a system. Group project required. PREREQUISITE: MECH 4311. **[I]**

**MECH 4315-6315. Heating, Ventilation and Air Conditioning. (3).** Psychrometric analyses, heating and cooling loads of buildings and analysis of air conditioning systems. PREREQUISITE: MECH 4311.

**MECH 4320. Mechanics of Materials II. (3).** Stress-strain analyses of thin-walled cylinders and spheres, springs, laterally-loaded struts, struts with initial curvature, rotating disks and cylinders; plastic yielding of beams and shafts; introduction to energy methods. PREREQUISITE: MECH 3320, 3322.

**MECH 4322. Mechanical Design. (3).** Analytical treatment of methods used in design process including creativity, probability, and optimization as applied to design process, from concept through preliminary design to final design. PREREQUISITE: MECH 3323.

**MECH 4323. Machine Design. (4).** Mechanical concepts and analysis applied to machine design; integrating finite element method, statistical analysis and computer-aided design into design projects; design projects accomplished through individual, team and class approaches. COREQUISITE: MECH 4322.

**MECH 4324-6324. Computer Methods in Design. (3).** Application of computer aided drafting packages to design of mechanical components and systems; introduction to fundamental concepts and principles of finite element methods and design optimization. Design project assignments using computer-aided engineering software for analysis and design solution. PREREQUISITE: MECH 3323, 3341.

**MECH 4325-6325. Advanced Mechanics of Materials. (3).** Beams on elastic foundations, experimental stress analysis, torsion of non-circular sections, curved beam theory, unsymmetrical bending. PREREQUISITE: MECH 3322.

**MECH 4326-6326. Biomedical Systems Analysis-Mechanical. (3).** Introduction to concepts used in analyzing living systems; simulation of body functions with mechanical and computer models; familiarization with design of mechanical bioengineering devices such as heart valves, heart-lung machines, renal dialysis machines. PREREQUISITE: MECH 2332, 3322.

**MECH 4330-6330. Introduction to Composite Materials. (3).** Introduction to fiber reinforced composite materials; mechanical behavior, strength, design methodology, and implementation of computer aided design. PREREQUISITE: MECH 3320, 3322, 3341.

**MECH 4331-6331. Turbomachinery. (3).** Basic principles of fluid mechanics and thermodynamics with application to rotating devices; ideal and actual operating characteristics of pumps, fans, turbines and compressors; constraints on design of real systems. PREREQUISITE: MECH 3331.

**MECH 4333-6333. Aerospace Propulsion Systems. (3).** Fundamentals of air breathing and rocket propulsion devices; principles of combustion thermodynamics, gas turbine operation, solid and liquid propellants, performance evaluation, and atmospheric and space mission propulsion requirements. PREREQUISITE: MECH 3331.

**MECH 4335. Thermodynamics and Heat Transfer Laboratory. (1).** Instrumentation and measurement techniques used in thermodynamics and heat transfer studies; experimental verification of basic principles with emphasis on organizing and reporting of results. *Three laboratory hours per week.* COREQUISITE: MECH 4311.

**MECH 4337-6337. Internal Combustion Engines. (3).** Principles of Otto and Diesel cycle engines; effects of various fuels and fuel delivery systems, air induction systems, ignition systems, and pollution control techniques on engine performance. PREREQUISITE: MECH 3312, 3331.

**MECH 4340-6340. Manufacturing Processes. (3).** Introduction to manufacturing processes: fundamentals of mechanical behavior of materials, manufacturing properties of materials; casting, bulk deformation, sheet-metal forming, material removal processes; processing of polymers, ceramics and glasses, composite materials; powder metallurgy; fastening and joining processes; nontraditional manufacturing processes; economics of integrated design and manufacturing; recent developments in manufacturing. PREREQUISITE: MECH 3320, 3322.

**MECH 4344. Mechanical Controls. (3).** Fundamental classical control concepts; modeling of linear mechanical control systems; transient, accuracy and performance analyses and design of control systems using root locus sketch, Nyquist diagrams and Bode plots. PREREQUISITE: MECH 3321.

**MECH 4345-6345. Design of Mechanisms. (3).** Graphical and analytical mechanism synthesis techniques for path generation, function generation, rigid body guidance and optimization of force transmission characteristics. PREREQUISITE: MECH 3321, 4322.

**MECH 4346-6346. Advanced Mechanical Controls. (3).** Advanced design and modeling of mechanical control systems; review of digital and optimal control systems and simulation of control systems. PREREQUISITE: MECH 4344.

**MECH 4350-6350. Principles of Biomechanics. (4).** Biomechanics of tissues and structures of musculosketetal system; biomechnics of all joints; applications of statics, mechanics, linear viscoelasticity. PREREQUISITE: MECH 3320, 3322.

**MECH 4360. Selection of Engineering Materials. (3).** Detailed study of main classes of materials and their properties and uses; design criteria for various failure modes and selected environment case studies, technical tutorials and design exercises. PREREQUISITE: MECH 3320, 3322.

**MECH 4365. Biomaterials. (3).** Biocompatibility and biofunctionality; materials for bone and joint replacement; materials for the cardiovascular system; materials and artificial organs; dental restorative materials; materials for drug delivery; materials for ophthalmology. PREREQUISITE: MECH 3320, 3322.

**MECH 4369. Process Heat Transfer. (3).** Engineering concepts and fundamental principles dealing with single and two phase fluid dynamic and heat transfer to design and analysis of process heat transfer equipment. PREREQUISITE: MECH 4311.

**MECH 4371-6371. Mechanical Vibrations. (3).** Kinematics of harmonic and non-harmonic vibrations; system of one and several degrees of freedom, free and forced vibrations; self-excited vibrations. PREREQUISITE: MECH 3321.

**MECH 4383-6383. Nondestructive Testing and Evaluation I. (3).** Visual and optical methods; radiographic methods; ultrasonic testing; acoustic emission; magnetic methods; eddy current method; penetrant testing; standards, training and certification issues; case studies; projects. PREREQUISITE: MECH 3320, 3323, 3341.

**MECH 4384-6384. Nondestructive Testing and Evaluation II. (3).** Nuclear radiographic methods; acoustic and dynamic techniques; magnetic resonance testing; volatile liquid testing; thin-layer chromatography; thermoelastic stress analysis; research techniques; case studies; projects. PREREQUISITE: MECH 4383

**MECH 4391. Mechanical Engineering Projects. (1-3).** Independent investigation of mechanical engineering problems in consultation with instructor. PREREQUISITE: senior standing. (A-F, IP)

**MECH 4395. Honors Thesis Proposal. (3).** Scholarly work in engineering requires advanced understanding in a particular field of study as well as the foundation in fundamental principles provided by the undergraduate curriculum. The student will work with an Honors Thesis advisor to identify a suitable thesis topic and to develop the advanced understanding required for scholarly study of that topic. A formal written and oral proposal must be accepted by the departmental honors committee for the successful completion of this course. PREREQUISITE: senior standing and approval by the departmental honors committee. (A-F, IP)

**MECH 4396. Honors Thesis. (3).** Original scholarly work is performed under the direction of an Honors Thesis advisor and reported in a thesis. Successful completion of this course requires an oral defense of the thesis and acceptance of the thesis by the departmental honors committee. PREREQUISITE: MECH 4395 and approval by the departmental honors committee. (A-F, IP)

**MECH 4990-98-6990-98. Special Topics in Mechanical Engineering. (1-3).** Topics are varied and in online class listings.

## (METH) MANUFACTURING ENGINEERING TECHNOLOGY

### Department of Engineering Technology

RONALD LEE DAY, M.A., *Chair*
*Room 203, Engineering Technology Building*
*http://www.people.memphis.edu/~engtech/home.html*

**METH 1711. Manufacturing Processes I. (3).** Metal manufacturing processes, including traditional machining, computer numerical control, and thermal metal cutting/joining; measurement, layout, and inspection techniques as applied to integrated manufacturing systems; coverage of threads, fasteners, and geometric dimensioning and tolerancing. *Two lecture hours, three laboratory hours per week.*

**METH 3386. Occupational Safety. (3). (TECH).** Hazards and safety procedures for general industry and construction.

**METH 3401. Strength of Materials. (3). (Same as ARCH 3401).** Force systems and their solution; that branch of mechanics dealing with forces and effects of forces acting upon rigid and deformable bodies at rest; analysis of structural materials. COREQUISITE: PHYS 2010/ 2111, TECH 3044,.

**METH 3408. Industrial Materials (4). (Same as ARCH 3408).** Material properties and the methods and standards used in testing these properties are introduced for metals, ceramics, polymers, and composites; emphasis on their mechanical properties; reinforced by testing in the laboratory, library and internet research, spreadsheet applications, reports, and individual presentations. *Three lecture hours, three laboratory hours per week.* PREREQUISITE or COREQUISITE: METH 3401.

**METH 3421. Manufacturing Processes II. (3).** Processes and techniques used to fabricate industrial materials into useful products; techniques covered include casting and molding, forming, separating, conditioning, assembling, finishing, and process design and control. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: METH 1711.

**METH 3440. Project Cost Evaluation. (3).** Industrial as well as personal financial situations and how they are affected by interest rates and "Time Value" of money; investigation of economic alternatives including applications of existing formulas, techniques, and methods.

**METH 3462. Industrial Statistics. (3).** Procedures for collecting, describing, presenting and statistically analyzing industrial data; basic probability theory; hypothesis testing and basic concepts of analysis of variance; introduction to Taguchi methods; spreadsheet software used for statistical analysis. PREREQUISITE: MATH 1710 or higher, and TECH 1010.

**METH 3573. Dynamics and Design for Automation. (3).** Analysis of rectilinear and curvilinear motion; kinematic analysis of mechanisms; design of mechanical systems; product design techniques as applied to integrated manufacturing systems. PREREQUISITE: METH 3401, TECH 3044.

**METH 4381-6381. Principles of Supervision. (3).** Functions of supervisory personnel. Reports and presentations.

**METH 4460-6460. Work Design, Improvement and Measurement. (3).** Analytical techniques and concepts for work methods inprovement, lean operation for production and distribution; performance measurement and evaluation; continuous improvement; fundamentals of human factors and ergonomics; work measurement using time study, predetermined time study systems, work sampling and development of standard data.

**METH 4462-6462. Statistical Quality Control. (3).** Statistical methods for quality analysis and improvement; control charts for variables and attributes, industrial sampling; defect prevention using the Poka-Yoke System; reliability; acceptance sampling; Quality standards, continuous improvement; use of comptuer software for data analysis and presentation. **[C]**

**METH 4464-6464. Production Control Systems. (3).** Functions of planning and controlling production and distribution operations; concepts of JIT, MRP, MRPII, ERP, and Japanese manufacturing techniques; analytical techniques and concepts for line balancing, production and process control, demand management and project management. PREREQUISITE: METH 4460, or equivalent, or permission of instructor.

**METH 4466-6466. Facility Design. (3).** Integrated approach to design and layout for production and distribution facilities with respect to workstation design, material handling, project and resource planning, production control; use of Computer Aided Design, scheduling and analytical software. Team projects, reports and presentations. PREREQUISITE: METH 4460 and METH 4464, or equivalent, or permission of instructor.

**METH 4472-6472. Computer Aided Drafting and Design. (3).** Overview of CADD technology, hardware and software options, two and three dimensional principles, and applications to produce computer generated design and working drawings. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: TECH 1521, or equivalent.

**METH 4474-6474. Automation and Robotics. (3). (TECH 4474).** Concepts of automation applied to production, distribution, and industrial robotics. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: TECH 1010 or CETH 1211.

**METH 4476-6476. Computer Aided Manufacturing. (3). (TECH 4476).** Computer numerical control programming by manual data input and distributed numerical control by computer assistance; system assessment of CNC machines and components for integrated manufacturing environment. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: CETH 3281 or METH 4472.

**METH 4571. Tool Design. (3).** Design of tooling systems and work holding for the integrated manufacturing environment; emphasis on geometric dimensioning and tolerancing, fast change-over techniques, hydraulic and pneumatic circuits, and achieving world class quality through design. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: METH 3421, 4472.

**METH 4990-98. Special Topics. (1-3).** Topics are varied and in online class listings. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.

**METH 4944. Senior Thesis. (3). (Same as CETH 4944, EETH 4944).** Study and research in specific area culminating in an integrating experience through individual and/or group projects and technical reports. (A-F, IP). **[W, I]**

## (MGMT) MANAGEMENT

ROBERT R. TAYLOR, Ph.D., *Chair*
*Room 202, Fogelman College of Business and Economics Administration Building*

**Students must have junior standing and have met specific course prerequisites with a minimum grade of "C" (2.0) to be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of "C" (2.0) in each; (2) minimum of 2.25 GPA (2.5 for Accounting majors) in all required lower division business courses and MATH 1830, and (3) 55 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements).**

**A surcharge of $10.00 per credit hour for 3000 and 4000 level courses and $20.00 per credit hour for 6000-9000 level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).**

**MGMT 1010. Introduction to Business. (2).** Acquaintance with major institutions and practices in business and coverage of elementary concepts of business; survey of functional areas of business and the activities of management; orientation for selection of major and infor-

mation on business career opportunities. NOTE: if taken by students with 50 hours or more, credit will not count for B.B.A. degree.

**MGMT 1011. Introduction to Management Lab. (1).** Series of field trips, service learning project and other experiences related to hospitality and resort management; tour of property, management overview, decision making areas, Business Control Points. COREQUISITE: MGMT 1010.

**MGMT 3110. Organization and Management. (3).** Comprehensive survey of management functions, basic concepts, and management principles; coverage of planning and decision making, organizing, directing, and controlling; coordination of organizational resources to achieve objectives.

**MGMT 3215. Management of Human Resources. (3).** Personnel functions and basic concepts; human resource planning, job analysis, staffing, development, compensation, employee/labor relations, health and safety, industrial employee union representation, and impact of the EEO legislation.

**MGMT 3510. Business Communication. (3).** Communication theory applied to business and the professions; emphasis on effective writing; presentation of written and oral case solutions, letters, memoranda, reports, and employment applications; selection and use of research sources; consideration of business ethics, technology, and intercultural communication. **[W]**

**MGMT 4110-19. Special Topics in Management. (3).** Topics are varied and in online class listings. PREREQUISITE: permission of instructor.

**MGMT 4240. Compensation and Performance Appraisal. (3).** Systematic examination of administration of wage and salary as tool of management; use of job descriptions, job analysis, and job evaluation methods, instruction in techniques of rationalizing wage structures; analyses of some outstanding considerations that must be taken into account in installing and administering wage programs are made. PREREQUISITE: MGMT 3110, 3215.

**MGMT 4251. Labor Relations. (3).** Examination of historical, legal, and institutional relationship between labor and management; negotiating/collective bargaining process, administration of contract, establishment and utilization of grievance procedures, and current issues in labor management relations. PREREQUISITE: MGMT 3110, 3215.

**MGMT 4260. Employee Staffing and Development. (3).** Examination of processes related to recruiting, selecting, and developing qualified persons for employment in organizations; determination of staffing needs, recruitment of a sufficient applicant pool, utilization of selection tools, and offering orientation training programs for employee development; emphasis on legal context of selection decisions. PREREQUISITE: MGMT 3110, 3215.

**MGMT 4420. Organizational Behavior in Business. (3).** Human relations as applied to people at work in all kinds of organizations; emphasis on understanding of human behavior and motivation of employees to work together in greater harmony; fundamentals of organizational behavior, leadership and its development, organizational environment, and communication and group processes. PREREQUISITE: MGMT 3110.

**MGMT 4510. International Business Communication and Negotiation. (3).** Importance of business communication in conducting global business effectively; emphasis on organizational and interpersonal communication and negotiation skills needed in an integrated world economy; culture-based assumptions, contrasting cultural values, communication and negotiation strategies, verbal and nonverbal patterns, cultural shock, and country-specific information. PREREQUISITE: MGMT 3510.

**MGMT 4710. Strategic Management. (3).** Advanced problems in determination, execution, and control of strategic management process in light of changing environments in which organizations operate. PREREQUISITE: MGMT 3110 and senior standing in The Fogelman College of Business and Economics. Enrollment limited to graduating seniors. **[I]**

**MGMT 4810. International Management. (3).** Introduction to issues in international business and exploration of environment facing firms in international arena; problems in planning, implementing, and controlling activities such as choosing foreign associates, selecting plant location, and dealing with labor, structure, legal constraints, and trade problems. PREREQUISITE: MGMT 3110.

**MGMT 4820. Entrepreneurship. (3).** Initiation process of new business venture. Participants as teams develop detailed development plan covering all phases of business initiation and development. PREREQUISITE: MGMT 3110.

**MGMT 4910. Management Problems. (1-3).** Student conductsn approved research projects in his or her major area under supervision of staff members. PREREQUISITE: senior standing and permission of department chair. (A-F, IP)

**MGMT 4911. Internship in Management. (1-6).** Internship in business organization to gain on-the-job experience. Project to be approved and supervised by department faculty. Credit allowed upon acceptance of report. PREREQUISITE: have successfully completed at least 15 hours of upper division business courses with a 2.75 GPA in these courses. (A-F, IP)

**MGMT 4996. Senior Honors Thesis in Management. (3).** Independent research open only to those students enrolled in the Honors Program. Thesis supervised by department faculty. PREREQUISITE: senior standing and permission of the Director of the Honors Program. (A-F, IP)

## (MKTG) MARKETING

GREGORY W. BOLLER, Ph.D., *Chair*

*Room 302, Fogelman College of Business and Economics Administration Building*

**Students must have junior standing and have met specific course prerequisites with a minimum grade of "C" (2.0) to be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of "C" (2.0) in each; (2) minimum of 2.25 GPA (2.5 for Accounting majors) in all required lower division business courses and MATH 1830, and (3) 55 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements).**

**A surcharge of $10.00 per credit hour for 3000 and 4000 level courses and $20.00 per credit hour for 6000-9000 level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).**

**MKTG 3010. Principles of Marketing (3).** Comprehensive study of structure and functions of marketing system in the firm, economy, and society; analysis of target markets, environments, and managerial aspects of marketing practices.

**MKTG 3012. Consumer Behavior. (3).** Why consumers behave as they do; psychological and sociological theories and principles applied to current marketing problems. PREREQUISITE: MKTG 3010.

**MKTG 3140. Advertising and Sales Promotion. (3).** Introduction to field of advertising including agencies, media, layout, copy, typography; emphasis on various media associated with sales promotion and on need to coordinate entire promotional mix. PREREQUISITE: MKTG 3010.

**MKTG 3320. Retailing Fundamentals. (3).** Changing concepts of retailing from management viewpoint; principles that underlie successful operation of enterprises distributing products and services to ultimate consumers. PREREQUISITE: MKTG 3010.

**MKTG 3410. Consultive Selling. (3).** Basics of personal selling: preparation, personality development, communications, sales interview techniques, ethics, and career opportunities; selling skills developed

via sales presentations, role playing, audio-visual self-observation, and use of sales aids.

**MKTG 3610. Logistics Management I. (3).** Distribution system within an organization; emphasis on transportation, customer service, inventory, warehousing and packaging functions. PREREQUISITE: MKTG 3010.

**MKTG 3620. Logistics Management II. (3).** Economic, social and political aspects of transportation system of the United States; interrelationships among transportation, physical distribution, logistics, marketing, production, and financial management as they affect flow of raw materials and finished goods through the firm. PREREQUISITE: MKTG 3610.

**MKTG 3630. Transportation Management. (3).** Detailed analysis of freight traffic function within firm's logistics system; rate and classification systems, claim liability, shipping document procedures, carrier selection, and other aspects associated with organizing and operating traffic department. PREREQUISITE: MKTG 3610.

**MKTG 4080. Marketing Research. (3).** Research methods and procedures used in marketing to solve business problems; traditional and innovative research designs, sampling, data analysis, dissemination of results; application of analytical techniques; hypothesis testing, regression, analysis of variance; database marketing, data mining research. PREREQUISITE: ISDS 3711 and MKTG 3010.

**MKTG 4230. Services Marketing. (3).** Marketing concepts and techniques in services industries compared to tangible goods marketing within the framework of total quality management.

**MKTG 4240. Relationship Marketing. (3)** Implementation of a direct marketing program, including telemarketing, cataloging, direct mail, electronic media, and direct response advertising, and how it fits into overall marketing strategies. PREREQUISITE: MKTG 3010.

**MKTG 4410. Sales Management. (3).** Sales management functions of recruiting and hiring, training and assimilating, planning, controlling and motivating, and sales analysis; role of personal selling in promotional mix and sales objectives of management. PREREQUISITE: MKTG 3010.

**MKTG 4444. Information Age Marketing. (3).** Retailing, advertising, sales, direct marketing as developed and executed in internet environment; strategic issues of electronic commerce. PREREQUISITE: MKTG 3010.

**MKTG 4470. Negotiation Skills. (3).** Emphasis on fundamental skills in negotiation across a variety of settings, including business, law, health care, and public administration; basics of both collaborative and competitive approaches, including planning tools and techniques; international focus addressed.

**MKTG 4530. International Marketing. (3).** Bases and promotion of foreign trade; international marketing organizations and methods; technical and financial features of international marketing. PREREQUISITE: MKTG 3010.

**MKTG 4570. Global Transportation, Tourism and Electronic Commerce. (3).** Analysis of worldwide transportation of passengers, lodging industry and tourism destinations; electronic methods of tourism research; alternative distributions systems for purchase of travel related services. PREREQUISITE: MKTG 3010.

**MKTG 4620. The Global Airline Industry. (3).** Problems confronting managers of airline companies worldwide; organization, operations, marketing strategies, pricing, finance, control, sales, equipment choice and acquisition, labor relations and governmental interfaces.

**MKTG 4790. Ethics in Marketing. (3).** Survey of concepts, issues, and decisions fundamental to ethical decision making in marketing; issues and decisions related to strategy planning and implementation in marketing organizations.

**MKTG 4800. Electronic Commerce and Marketing Strategy. (3).** Concepts of marketing in an electronic commerce environment; concepts in relationship marketing, promotions on the internet, direct and database marketing, and web page marketing. PREREQUISITE: MKTG 3010.

**MKTG 4901. Management of Marketing Strategies. (3).** Comprehensive study of marketing strategies and implementation; computer simulated case studies; projects developed for integration of marketing practice in contemporary business applications. Student should take in final semester. PREREQUISITE: MKTG 3012, 3140.

**MKTG 4910. Problems in Marketing. (1-3).** Students conduct approved research projects in their major area under supervision of staff member. PREREQUISITE: senior standing and permission of department chair. (A-F, IP)

**MKTG 4911. Marketing Internship. (1-6).** Internship in business organization to gain on-the-job experience. Project to be approved and supervised by department faculty member. Credit allowed only after acceptance of student's written report. PREREQUISITE: have successfully completed at least 15 hours of upper division business courses with a 2.75 GPA in these courses. (A-F, IP)

**MKTG 4920-29. Special Topics in Marketing. (3).** Topics are varied and in online class listings. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of department chair.

**MKTG 4996. Senior Honors Thesis in Marketing. (3).** Independent research open only to those students enrolled in the Honors Program. Thesis supervised by department faculty member. PREREQUISITE: senior standing and permission of the Director of the College Honors Program. (A-F, IP)

## (MMCS) MICROBIOLOGY AND MOLECULAR CELL SCIENCES

STEVEN D. SCHWARTZBACH, Ph.D., *Chair*
*Room 201, Life Sciences*

*http://www.people.memphis.edu/~microcell/mmcs.html*

***Additional fees are charged for some Microbiology and Molecular Cell Sciences lecture and laboratory courses.* See the online class listings or the Expenses section of the Bulletin.**

BIOL/MMCS 1110 and 1111 are prerequisites for all upper division MMCS courses. BIOL 1120 and 1121 are prerequisites for all upper division MMCS courses except 3130, 3500, and 3600.

**MMCS 1010. Introduction to Biology I. (3). (Same as BIOL 1010).** General overview of cellular structure and function, genes and biodiversity. NOTE: credit will not apply toward a major or minor in the sciences, nor will it satisfy any part of the science requirements for pre-professional curricula. *Three lecture hours per week.* ♦

**MMCS 1011. Introduction to Biology I Laboratory. (1). (Same as BIOL 1011).** Laboratory observations, demonstrations and experiments designed to apply scientific methods to lecture subjects. *Two laboratory hours per week.* PREREQUISITE or COREQUISITE: BIOL 1010 or MMCS 1010. ♦

**MMCS 1110. General Biology I. (3). (Same as BIOL 1110).** Unifying principles of biology with emphasis on cell structure, cell function, heredity, development, and origin and diversity of prokaryotes and lower eukaryotes. NOTE: course designed for students majoring in the natural sciences or pursuing a pre-professional curricula. *Three lecture hours per week.* PREREQUISITE: minimum grade of "C" in CHEM 1110. ♦

**MMCS 1111. General Biology I Laboratory. (1). (Same as BIOL 1111).** Investigative laboratory in introductory cell and molecular biology; experimental theory and design; practical laboratory skills; interpretation of data; documentation, communication of laboratory work. *Three laboratory hours per week.* PREREQUISITE or COREQUISITE: BIOL 1110 or MMCS 1110. ♦

**MMCS 1230. Microbiology. (3). (1451, BIOL 1451).** Microorganisms and their basic characteristics, with emphasis on relationship to pathogenesis and disease prevention. Credit not accepted for BIOL or MMCS major or minor. *Three lecture hours per week.* ♦

**MMCS 1231. Microbiology Laboratory. (1). (1452, BIOL 1452).** Laboratory observations, demonstrations and experiments designed to apply scientific methods to lecture subjects. Credit not accepted for BIOL or MMCS major or minor. *Two laboratory hours per week.* PREREQUISITE or COREQUISITE: MMCS 1230. ♦

**MMCS 3130. Cell Biology. (3). (BIOL).** Introduction to principles of cell and molecular biology as they relate to eukaryotic cells with emphasis on functions common to most cell types. *Three lecture hours per week.* PREREQUISITE: CHEM 1120.

**MMCS 3500. Microbiology I: Fundamental Aspects. (3). (BIOL 3551).** Origins, anatomy, composition, physiology, reproductive mechanisms, growth and diversity of microorganisms. *Three lecture hours per week.*

**MMCS 3550. Microbiology II: Medical and Applied Aspects. (3).** Interactions of microorganisms with each other, with higher organisms, including humans, and with abiotic systems. Symbiosis, pathogenesis, micro- to planetary-scale ecology, and biotechnology. *Three lecture hours per week.* PREREQUISITE: MMCS 3500.

**MMCS 3600. General Microbiology Laboratory. (2). (BIOL 3555).** Essential microbiological laboratory skills such as aseptic technique, microscopy, and bacterial culture and characterization. *Four laboratory hours per week.* PREREQUISITE or COREQUISITE: MMCS 3500 and CHEM 1121.

**MMCS 4000. Research. (1-4).** Independent laboratory or field research with faculty supervision; formal paper required if taken for 3 or 4 credits. *Three to twelve laboratory hours per week.* May be repeated for a maximum of 4 hours credit.

**MMCS 4090-99-6090-99. Special Topics in Microbiology and Molecular Cell Sciences. (1-3).** Topics are varied and in online class listings. May be repeated for a maximum of 4 hours credit. PREREQUISITE: junior standing and permission of instructor.

**MMCS 4150-6150. Developmental Biology. (3). (BIOL 4150).** Introduction to study of developing biological systems at cellular and molecular level. *Three lecture hours per week.* PREREQUISITE: BIOL 3072 and CHEM 3312.

**MMCS 4200. Cell and Developmental Biology Laboratory. (2). (BIOL 4152).** Application of modern laboratory techniques and instrumentation to experiments in cell and developmental biology. *Four laboratory hours per week.* PREREQUISITE: BIOL 3072, MMCS 3600 and CHEM 3312.

**MMCS 4300. Microbial Physiology. (3). (BIOL 4430).** Cell structure and function; biosynthesis, degradation and metabolic regulation; regulation of growth. *Three lecture hours per week.* PREREQUISITE: MMCS 3550 and CHEM 3312.

**MMCS 4325. Microbial Genetics. (3).** Introduction to the principles of microbial genetics with emphasis on bacteriophage, prokaryotic and yeast genetics; mutation, conjugation, transformation, transduction, recombination, plasmids, gene mapping and applications of genetic modifications are covered. *Three lecture hours per week.* PREREQUISITE: BIOL 3072, CHEM 1120 and MMCS 3550.

**MMCS 4350-6350. Microbial Biotechnology. (3). (BIOL 3560).** Principles underlying practical applications of microorganisms, including synthesis of commercial products, vaccines and antibodies, bioremediation and biomass utilization, plant biotechnology and food production. *Three lecture hours per week.* PREREQUISITE: MMCS 3550 and CHEM 3312.

**MMCS 4375-6375. Molecular Biology of Parasites and Their Vectors. (3).** Emphasis on molecular and immunological aspects of parasites of humans, companion animals and livestock. The biology, treatment and prevention of parasitic diseases. *Three lecture hours per week.* PREREQUISITE: MMCS 3130 or 3550.

**MMCS 4380-6380. Histology: Tissue and Organ Biology. (4).** Relationship between structure and function in mammalian tissues and organs; human histology emphasized. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: a course in vertebrate physiology is recommended.

**MMCS 4400-6400. Plant Cell and Molecular Biology. (3).** The cellular and molecular basis of plant development, including plant hormones, signal transduction, regulation by light, plant-microbe interactions and plant transformation. *Three lecture hours per week.* PREREQUISITE: MMCS 3130 and BIOL 3072.

**MMCS 4440-6440. Pathogenic Bacteriology. (3). (BIOL).** Survey of pathogenic bacteria, human and veterinary, diseases they cause, and methods of diagnosis; molecular basis of pathogenesis; introduction to immunological principles and immunity. *Three lecture hours per week.* PREREQUISITE: MMCS 3550 and CHEM 3312.

**MMCS 4445-6445. Immunology. (3). (BIOL 4445).** Antigens, immunoglobulin classes, cells and cytokines of immune response, complement system, hypersensitivities, blood groups, vaccines and immunity. *Three lecture hours per week.* PREREQUISITE: MMCS 3550 and CHEM 3311.

**MMCS 4450-6450. Microbial Ecology. (3). (BIOL).** Roles of microorganisms in the environment; microbial processes, interactions with the environment and biota, population ecology, community ecology, and biodegradation. *Three lecture hours per week.* PREREQUISITE: MMCS 3550, 4511 and 4512, or permission of instructor.

**MMCS 4460-6460. Advanced General Microbiology Laboratory. (2).** Application of modern laboratory techniques and instrumentation to experiments in microbial physiology, genetics, ecology and biotechnology. *Four laboratory hours per week.* PREREQUISITE: MMCS 3550 and 3600.

**MMCS 4465-6465. Advanced Medical Microbiology Laboratory. (2).** Application of modern laboratory techniques and instrumentation to experiments in pathogenic bacteriology, immunology, virology and parasitology. *Four laboratory hours per week.* PREREQUISITE: MMCS 3550 and 3600.

**MMCS 4470-6470. Molecular Genetics. (4). (BIOL).** Structure, function and replication of DNA, recombination, colinearity of DNA with genetic map, mutagenesis, plasmids, genetic code, protein synthesis, suppression, regulation of gene expression, genetic engineering and immunogenetics. For students without formal training in molecular genetics. *Four lecture hours per week.* PREREQUISITE: MMCS 3130 or 3500 and BIOL 3072.

**MMCS 4501-6501. Virology. (3). (BIOL).** Introductory study of viruses of human and veterinary significance and methods of cultivation, isolation and characterization; study of pathogenic mechanisms. *Three lecture hours per week.* PREREQUISITE: MMCS 3550.

**MMCS 4503-6503. Biochemistry Laboratory I. (2). (BIOL). (Same as CHEM 4501).** Survey of common biochemical techniques and the properties of biological molecules; emphasis on purification and assay of enzymes and on enzyme kinetics. *Six laboratory hours per week.* PREREQUISITE: CHEM 3302, or CHEM 3201 and 3301. PREREQUISITE OR COREQUISITE: MMCS 4511 or CHEM 4511.

**MMCS 4504-6504. Biochemistry Laboratory II. (2). (BIOL). (Same as CHEM 4502).** Biochemical laboratory techniques; emphasis on nucleic acids and recombinant DNA techniques. *Six laboratory hours per week.* PREREQUISITE: MMCS 4511 or CHEM 4511, MMCS 4325 or 4470, or permission of instructor.

**MMCS 4511-6511. Biochemistry 1. (3). (BIOL). (Same as CHEM 4511).** Chemistry of amino acids and proteins related to their properties in biochemical systems; enzymology, including kinetics and conformation studies; coenzymes and their functions; importance of pH; bioenergetics; chemistry of carbohydrates, lipids, and nucleotides. *Three lecture hours per week.* PREREQUISITE: CHEM 3312.

**MMCS 4512-6512. Biochemistry II. (3). (BIOL) (Same as CHEM 4512).** Metabolism of carbohydrates, amino acids and nucleotides, with emphasis on mammalian systems; biochemistry of DNA and RNA, including their relationship to biosynthesis of proteins, DNA and RNA. *Three lecture hours per week.* PREREQUISITE: MMCS 4511 or CHEM 4511.

**MMCS 4570. Practicum in Microbiology and Molecular Cell Sciences. (1-4).** Directed extradepartmental studies in microbiology and molecular cell sciences. A maximum of four hours credit may be applied to degree requirements. PREREQUISITE: MMCS major and permission of department chair. (S/U).

**MMCS 4580-99-6580-99. Special Topics in Biochemistry. (1-3) (Same as CHEM 4580-99).** Topics of current interest in biochemistry. Topics are varied and in online class listings. PREREQUISTE: CHEM 4512 and permission of instructor.

**MMCS 4900. Honors Thesis Research. (1-3).** Independent research conducted under direction of a faculty member in the department and culminating in an acceptable thesis. Must be repeated in four consecutive semesters for a maximum of 8 hours credit. A maximum of 4 hours credit may be applied to the major. PREREQUISITE: admission to MMCS Honors Program. (A-F, IP)

## MUSIC

### Rudi E. Scheidt School of Music

PATRICIA HOY, D.M.A., *Director*
*Room 123B, Music Building*
*http://music.memphis.edu*

**APPLICATION AND AUDITION PROCEDURES:** Special application and audition procedures are required. See the description of the music programs in Colleges and Degree Programs.

**PIANO PROFICIENCY:** All undergraduate music majors must take a piano placement evaluation before enrolling in applied music courses. This evaluation will place students in the appropriate piano class (MUAP 1105, 1106, 2107, 2108) to develop skills necessary to pass the Piano Proficiency Examination. All students in the Bachelor of Music (in Music) degree program must pass the Piano Proficiency Examination before the beginning of the senior year. This may be done in either of two ways: (1) by completing MUAP 2108, or (2) by passing, without credit, the Piano Proficiency Examination given once each semester. Piano proficiency requirements vary according to the area of concentration. A verification will be mailed to the student and appropriate officials upon completion of the examination. After successful completion of this examination, music students whose major instrument is not piano may audition for introductory instruction or private piano instruction.

**MUSIC INDUSTRY PIANO PROFICIENCY:** In lieu of the above piano proficiency, all Bachelor of Music commercial music majors, with the exception of keyboard students and students with a concentration in Music Business or Recording Technology must pass the commercial music piano proficiency examination before their final semester in the program.

**PATTERNS OF COURSE OFFERINGS:** Patterns of course offerings are indicated in some course descriptions. (F) indicates the course is offered during the Fall Semester; (SP) indicates Spring. Courses with no indications of offering are offered either every semester or as needed. There is no guarantee that courses will always be offered as indicated. Always check the online class listings for availability.

## (MUAP) APPLIED MUSIC

### Rudi E. Scheidt School of Music

PATRICIA HOY, D.M.A., *Director*
*Room 123B, Music Building*
*http://music.memphis.edu*

Applied music courses are divided into two broad categories: (1) small group or individual lessons in vocal or instrumental performance and (2) musical ensembles.

Individual lessons, vocal or instrumental performance are offered as INTRODUCTORY INSTRUCTION, LOWER DIVISION, AND UPPER DIVISION applied music (see explanation below). Individual lessons in vocal or instrumental performance are given by university faculty who are members of the relevant Applied Music Division.

All students who wish to enroll in applied vocal or instrumental performance must perform an audition for the members of the appropriate Applied Music Division or for a designate of the appropriate division. Because the number of students who can be accepted is limited, it is advisable that the student audition as early as possible to be assured a place with the requested teacher. Practice facilities are provided without charge, but there are additional fees for the individual lessons (see the explanation below under FEES), and a fee is required for certain practice room keys.

Examinations for courses in which the student is to receive credit for applied music in vocal or instrumental performance are called Board Exams. For Board Exams, each student performs musical selections and/or technical exercises of a grade of difficulty appropriate to the level of instruction in which the student is enrolled. The board hearing the exam is made up of the members of the appropriate Applied Music Division (for further information, see the explanation below under EXAMINATIONS).

Music majors at The University of Memphis are expected to participate in School of Music ensembles; each degree program has specific or general ensemble requirements (see above under the various degree requirements). Non-music majors enrolled at The University of Memphis as degree-seeking students may audition and, if accepted, enroll for applied instruction where staff time is available. If accepted at the Lower Division or Upper Division level for applied instruction, non-music majors must simultaneously enroll and participate in an ensemble sponsored by the School of Music.

Any student enrolled at The University of Memphis may audition for applied jazz lessons as space permits. Any student accepted for applied jazz lessons must concurrently participate in an appropriate jazz ensemble or combo. Jazz ensemble assignments are made following the jazz auditions during registration week at the beginning of the semester.

All jazz and studio bass majors must simultaneously be enrolled in classical bass, MUAP 1541 until a level of proficiency equal to entrance into upper division is attained.

All jazz and studio guitar majors must take six semester hours of classical guitar which is the maximum allowable for credit toward the degree. If a student can meet the requirements in less time, and wishes to discontinue classical study, the student may do so with permission of the instructor and consultation with the jazz and studio faculty. In the event a student cannot meet the requirements after six semester hours of study, it is the student's responsibility to pursue classical guitar as an elective or until such time as requirements are met to the satisfaction of the guitar and jazz and studio faculty.

FEES: In addition to the regular student fees, all persons taking applied music will be assessed $50 per semester for the half-hour lessons. Students registering for one (1) semester hour credit will receive one half-hour lesson per week. All others will receive one hour lesson per week regardless of credit hours at a fee of $100. The integration courses, Artist Recital and Senior Project in Music, are taught as applied and require a $100 fee. The Senior Composition Recital and Senior Project in Music History are also taught as applied but do not carry a fee.

### APPLIED MUSIC COURSES

| Instrument | Introductory Instruction (1) | Lower Division (2-3 each) | Upper Division (2-4 each 4000 level 1-2 each 6000 level) |
|---|---|---|---|
| Trumpet | 1110 | 1111 | 4111-6111 |
| Horn | 1120 | 1121 | 4121-6121 |
| Trombone | 1130 | 1131 | 4131-6131 |
| Jazz Trombone | | 1132 | 4132 |
| Tuba | 1140 | 1141 | 4141-6141 |
| Euphonium | | 1142 | 4142-6142 |
| Cornett | 1150 | 1151 | 4151-6151 |
| Sackbut | 1160 | 1161 | 4161-6161 |
| Piano | 1310 | 1311 | 4311-6311 |
| Harpsichord | 1320 | 1321 | 4321-6321 |
| Organ | 1330 | 1331 | 4331-6331 |
| Percussion | 1410 | 1411 | 4411-6411 |
| Violin | 1510 | 1511 | 4511-6511 |
| Baroque Violin | | 1512 | 4512-6512 |
| Viola | 1520 | 1521 | 4521-6521 |
| Cello | 1530 | 1531 | 4531-6531 |
| Bass | 1540 | 1541 | 4541-6541 |

| | | | |
|---|---|---|---|
| Guitar | 1550 | 1551 | 4551-6551 |
| Harp | 1560 | 1561 | 4561-6561 |
| Viola da Gamba | 1570 | 1571 | 4571-6571 |
| Voice | 1610 | 1611 | 4611-6611 |
| Flute | 1710 | 1711 | 4711-6711 |
| Oboe | 1720 | 1721 | 4721-6721 |
| Clarinet | 1730 | 1731 | 4731-6731 |
| Saxophone | 1740 | 1741 | 4741-6741 |
| Jazz Saxophone | | 1742 | 4742 |
| Bassoon | 1750 | 1751 | 4751-6751 |
| Recorder | 1760 | 1761 | 4761-6761 |
| Jazz Trumpet | | 1112 | 4112 |
| Jazz Piano | | 1312 | 4312 |
| Jazz Percussion | | 1412 | 4412 |
| Jazz Bass | | 1542 | 4542 |
| Jazz Guitar | | 1552 | 4552 |
| Jazz Voice | | 1612 | 4612 |

Applied Music Lessons consist of individual instruction on the above listed instruments as well as attendance at weekly studio classes run by the instructor for the individual instruments. Studio class attendance is required for music majors. Studio classes generally meet on Fridays at 12:35 p.m., but students should contact the instructor for the exact day and time their studio class meets. In addition, music majors enrolled in applied lessons must also attend the area workshops scheduled in their respective areas.

**REGISTRATION:** Students will register for lessons in the same manner and at the same time as they register for other courses; however, students may not be assigned to a course number until they have auditioned. Auditions are held in the Music Building during the pre-college counseling, advising and registration periods before each semester. Auditions may be scheduled in the Music Office, room 123, Music Building. Any inquiries concerning credits or course numbers should be directed to the director of the School of Music.

**CREDITS AND GRADES:** Students may register for one or two hours credit per semester and will be assigned to individual lessons, a master class, or a combination of the two, commensurate with their level of performance. Additional credit may be earned at the lower division and upper division level. Students earning more than two credits per semester will be assigned additional practice and will be expected to perform at a higher level than those students registered for fewer credits. Grades are awarded on the same basis and have the same significance as in other subjects.

**REPETITION OF COURSES:** MUAP courses in individual lessons and major group instruction, small ensembles, and large ensembles may be repeated for credit but not for the purpose of improving the grade originally earned.

**EXAMINATIONS:** For an examination in applied music, students will prepare and perform for members of the faculty of the School of Music suitable musical selections and technical exercises of a grade of difficulty appropriate to their standing. Examinations are held in designated rooms on days set aside for this purpose near the end of each semester. Credit for the course will not be awarded to any student who fails to take the examination.

**MUAP 1100. Class Piano for Non-Music Majors. (1).** Beginning instruction in piano for non-music majors; development of basic reading and performance skills.

**MUAP 1105. Class Instruction in Piano I. (1).** Basic technique, with emphasis on sight-reading. PREREQUISTE: MUTC 1001, or permission of instructor.

**MUAP 1106. Class Instruction in Piano II. (1).** Playing of songs used in school music teaching; community songs, and hymns. PREREQUISITE: MUAP 1105, MUTC 1108,1010.

**MUAP 1413. Ethnic Percussion. (1).** Performance on Latin American and African instruments focusing on African and Afro-Cuban hand drumming traditions.

**MUAP 2107. Class Instruction in Piano III. (1).** Simpler Bach chorales, more difficult songs and accompaniments, appropriate to the student's major field; memorization optional. PREREQUISITE: MUAP 1105, MUTC 1009, 1011.

**MUAP 2108. Independent Studies in Piano Proficiency. (1).** Piano repertoire and technique, accompaniments, harmonization, transposition, and sight trading to satisfy the core requirements of the piano proficiency exam. Requirements vary according the student's concentration area and the degree emphasis. PREREQUISITE: MUAP 2107; MUTC 1009, 1011. **(T grade allowed).** (A-F, IP)

**MUAP 2201. Historical Techniques for Woodwind Instruments. (1).** Introduction to historical woodwind instruments; historical playing techniques for both historical and modern instruments.

**MUAP 3301. Chamber Music for Keyboard. (1).** Collaborative performance for pianist, harpsichordists, and organists with keyboard, brass, winds, strings, percussion, and vocalists; open to students in keyboard concentration and others through audition.

**MUAP 3999. Junior Recital. (1).**

**MUAP 4004-6004. Orchestral Excerpts. (2).** Study and performance of selected orchestral excerpts suitable for auditions. PREREQUISITE: permission of instructor.

**MUAP 4260-69-6260-69. Special Topics in Applied Music. (1-3).** Topics are varied and in online class listings.

**MUAP 4263-6263. Reed Making. (1).** Laboratory course designed to give students the necessary skills to become independent reed makers. For students of oboe or bassoon. May be repeated for credit.

**MUAP 4799. Conducting Recital. (1).**

**MUAP 4801-6801. Individual Studies in Applied Music. (1-3).** Directed individual instruction in applied area not listed under MUAP. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of director. (A-F, IP)

**MUAP 4999. Artist Recital. (4).** Integration course in which knowledge and skills developed in music history, music theory, and applied music courses are utilized systematically in the preparation and presentation of a public musical performance and of an accompanying descriptive paper. Taught as applied music, individual instruction. PREREQUISITE: a minimum of 4 hours upper division lessons and permission of the instructor. [I] (A-F, IP)

**INTRODUCTORY INSTRUCTION:** Any student may audition for lessons at the one-hour level except in organ; organ students must have the ability to play the piano before beginning organ instruction. A student may not receive more than four hours credit in any one area of major group instruction. The fee for major group instruction will be the same as for one half-hour lesson per week: $50 per semester.

**LOWER DIVISION COURSES:** Applied music courses in the lower division include the study normally carried out during the freshman and sophomore years. Piano or instrumental students at this level should have had several years of intensive study prior to University entrance so that they have a secure, reliable, and well-grounded technique on the instrument. Organ students may begin at this level provided that they play the piano well and have reasonable ability in sight-reading. Those who do not meet this requirement will register for MUAP 1310. To be admitted to lower division study a student must first pass a qualifying examination.

Students who fall short of the requirements for admission to the lower-division courses will be advised to register for major group instruction until deficiencies are eliminated. Course numbers will be repeated for each semester of study.

**UPPER DIVISION COURSES:** Promotion to the upper division does not follow automatically after the completion of four semesters of courses in the lower division but is made only on the recommendation of the upper division examining committee; such a recommendation will be made only if the student's proficiency as a performer bears promise of future artistic and professional qualities as a soloist. It is at this level that the student normally begins preparation for a recital.

**JUNIOR RECITAL, ARTIST RECITAL, and SENIOR PERFORMANCE PROJECT:** The Junior Recital is required for the Performance Concentration under the Bachelor of Music in Music degree. The Artist Recital is required for the Performance Concentration and the Sacred Music Concentration. The Senior Performance Project is required under the School of Music Concentration. The Artist Recital and the Senior Performance Project are integration courses for which the student must prepare both a public recital and a paper. To register for the Junior Recital and the Senior Performance Project, students must have successfully completed at least two years of credit in upper division lessons in their applied area. To register for the Artist Recital, students must have successfully completed at least four hours of credit in upper division lessons in their applied area. The Junior Recital must be approved by the appropriate applied music faculty through a hearing. Both the musical and the written portions of the Artist Recital and the Senior Performance Project must be approved by the appointed faculty committee through a reading and a hearing. Upon approval, the student may schedule a date for the public performance and make arrangements for the printing of the program. The public performance must be presented no later than two weeks after the date of the hearing.

**SMALL, CHAMBER, AND SPECIALIZED ENSEMBLES:** Advanced students are encouraged (and for certain degree plans are required) to participate in the following groups. Selection for membership is based on audition; courses may be repeated with the approval of the student's advisor. *Three one-hour meetings per week.*

**MUAP 3101. Brass Ensemble. (1).** Practical applications of brass performance techniques for a small chamber ensemble, one performer to a part; survey of brass chamber music. PREREQUISITE: permission of instructor.

**MUAP 3104. Collegium Musicum. (1).** Use of early musical instruments and voice in performance of early music; primary sources used in preparation of performances. PREREQUISITE: permission of instructor.

**MUAP 3401. Percussion Ensemble. (1).** Study and performance of selected traditional, contemporary, avant garde and pops percussion literature. Open to students in percussion concentration and others through audition.

**MUAP 3402. Contemporary Chamber Players. (1).** Ensemble of mixed and variable instrumentation; performance of repertoire written since 1900 and little known works of other periods. Primary goal of ensemble: to provide experiences in solving unique performance problems of contemporary music. PREREQUISITE: permission of instructor.

**MUAP 3403. Orff Ensemble. (1).** Study and performance of literature written for Orff instruments, including barred percussion, unpitched percussion, and recorder.

**MUAP 3501. Chamber Music for Strings. (1).** Study and performance of string chamber music repertory. Coaching sessions weekly with a member of music faculty. Open to music majors and non-music majors through audition.

**MUAP 3503. Double Bass Ensemble. (1).** Study and performance of works for bass ensemble. Open to music majors and non-majors through audition.

**MUAP 3504. Guitar Ensemble. (1).** Study and performance of works for guitar ensemble. Open to music majors and non-music majors through audition.

**MUAP 3505. Cello Ensemble. (1).** Study and performance of works for cello ensemble. Open to music majors and non-majors through audition.

**MUAP 3601. Camerata Singers. (1).** Small vocal ensemble of varying sizes and resources specializing in performance of music from Medieval through Baroque periods. Open to music majors and non-music majors through audition.

**MUAP 3602. Opera Workshop. (1-6).**

**MUAP 3603. Opera Soloists. (1).** Preparation and performance of role in major production of University Opera Theater. Audition required.

**MUAP 3604. Opera Production Laboratory. (1-6).**

**MUAP 3701. Woodwind Ensemble. (1).** Study and performance of original and transcribed works for varied combinations of woodwind instruments. Audition required.

## LARGE MUSICAL ORGANIZATIONS

All music students must take a minimum of eight (8) semesters of ensemble. The exact number of large ensembles and other (or small) ensembles is determined by each division and major concentration. In addition, the designations of which ensembles will satisfy large ensemble requirements are determined by each division. Therefore, it is necessary to consult with your advisor for the specific outline for your applied area and degree program. Transfer students lacking sufficient large ensemble credits should consult with their advisor and/or the department chair to determine a method of rectifying the situation. Ensemble assignments are based on audition and may be repeated. Any exception to this general ensemble assignment policy may be made after a review of petitions by the school director, the appropriate ensemble director, and the applied studio teacher.

**MUAP 2001. University Concert Band. (1).** Performance of traditional and contemporary wind compositions. Participants chosen from this ensemble for basketball pep-bands. Open to music majors and non-music majors.

**MUAP 2002. Marching Band. (2).** Selected ensemble that performs at all home football games and occasional out-of-town games in each season. Rehearsal approximately ten hours weekly. Open to music majors and non-music majors. [G]

**MUAP 2003. Varsity Band. (1).** Concert performance of traditional and contemporary wind compositions. Participants are chosen from this ensemble for basketball pep-bands and usually have participated in Fall marching band. Open to music majors and non-music majors.

**MUAP 2004. University Gospel Choir. (1).** Ensemble open to all students. Music includes contemporary gospel, spirituals, and gospel hymns. Serves as outlet for students interested in developing musical and personal capacities. Open to music majors as elective. Two class meetings per week.

**MUAP 3004. University Wind Ensemble. (1).** Select ensemble of instrumentalists. Study and performance of outstanding repertory for wind ensembles. Open to music majors and non-music majors through audition.

**MUAP 3005. University Orchestra. (1).** Study and performance of major orchestral literature. Additional opportunities for opera, chamber-orchestral and chamber ensemble performance. Audition required.

**MUAP 3006. University Singers. (1).** Study and performance of choral works from broad spectrum of choral literature; sacred, secular, accompanied and a cappella. Open to music majors and non-music majors through audition.

**MUAP 3007. Opera Chorus. (1).** Choral ensemble for opera productions with exploration of related stage techniques. Extra rehearsals at discretion of conductor. Audition required.

**MUAP 3008. Oratorio Chorus. (1).** Study and performance of major works primarily oratorio in nature. Open to music majors, non-music majors and the off-campus community. Audition required.

**MUAP 3016. Sound Fuzion. (1).** Preparation and performance of vocal/instrumental music from American popular culture. May be repeated for credit. Entrance by audition.

## JAZZ AND STUDIO ENSEMBLES

### Rudi E. Scheidt School of Music

PATRICIA HOY, D.M.A., *Director*
*Room 123B, Music Building*
*http://music.memphis.edu*

**MUAP 1116. Class Instruction in Piano: Jazz/Pop/Commercial. (1).** Basic harmonic patterns, chord symbol realization, voicing, basic rhythmic patterns. PREREQUISITE: MUSE 1105, or equivalency exam.

**MUAP 3012. University Instrumental Jazz Ensemble. (1).** Study and performance of varied jazz styles, including repertory from standard big band literature and studio ensembles. Open to music majors and non-music majors through audition. This course will meet large ensemble requirements for Music Industry majors only.

**MUAP 3013. University Vocal Jazz Ensemble. (1).** Study and performance of varied jazz styles, including repertory from standard big band literature and studio ensembles. Open to music majors and non-music majors through audition. This course will meet large ensemble requirements for Music Industry majors only.

**MUAP 3014. Recording Studio Instrumental Ensemble. (1).** Ensemble performs and records works written by students in the Music Industry program. This course will meet large ensemble requirements for Music Industry majors only.

**MUAP 3015. Recording Studio Vocal Ensemble. (1).** Ensemble performs and records works written by students in the Music Industry program. This course will meet large ensemble requirements for Music Industry majors only.

**MUAP 3103. Jazz Combo. (1).** Practical application of basic jazz improvisatory skills; combo experiences in all jazz styles; traditional, bop, contemporary. Audition required.

**MUAP 4103-6103. Jazz and Studio Ensemble Techniques. (3). (CMUS).** Jazz and studio performance styles and practices, emphasizing ensemble rehearsal and conducting techniques, articulation, phrasing, balance and blend, line dominance, and recording studio performance skills. PREREQUISITE: MUTC 3828. **(F).**

**MUAP 4895. Senior Project: Jazz and Studio Performance. (3). (CMUS).** Project must include live and recorded performances demonstrating the student's mastery of various styles of jazz and popular music performance. PREREQUISITE: upper division standing in applied music, MUTC 3827, or permission of instructor. [I] (A-F, IP)

## (MUHL) MUSIC HISTORY, LITERATURE, AND APPRECIATION

### Rudi E. Scheidt School of Music

PATRICIA HOY, D.M.A., *Director*
*Room 123B, Music Building*
*http://music.memphis.edu*

**MUHL 3301. History of Music to 1700. (3).** Development of significant musical styles; attention to individual contribution of major composers. PREREQUISITE: MUTC 2008, or permission of instructor. **(F). [W]**

**MUHL 3302. History of Music Since 1700. (3).** Continuation of MUHL 3301. PREREQUISITE: MUTC 2008, or permission of instructor. **(Sp). [W]**

**MUHL 3303. Western Music History. (3).** Study of major style periods in Western Music History for the non-performance student in music.

**MUHL 4001-6001. Piano Repertory. (2).** Survey of stringed keyboard repertory from Bach and his contemporaries to the present. Representative works analyzed regarding historical, stylistic, formal and aesthetic features. PREREQUISITE: junior standing in music, or permission of instructor. **(F)** (A-F, IP)

**MUHL 4002-6002. Song Repertory I. (3).** Survey of solo literature from the Italian, British Isles, and German Schools of song.

**MUHL 4003-6003. Song Repertory II. (3).** Survey of solo literature from the French, Russian and Slavic, Scandinavian, and American Schools of song.

**MUHL 4005-6005. History and Literature of the Organ. (3).** Literature for the organ and its effect on and interaction with organ design.

**MUHL 4006-6006. Classical Guitar Literature I. (3).** Study of the basic repertoire from the medieval period through the pre-classical period.

**MUHL 4007-6007. Classical Guitar Literature II. (3).** Study of the basic repertoire from the classical period to the present.

**MUHL 4008-6008. The Symphony. (3).** Survey of development of the symphony from 18th century to present with focus on important composers and works; discussion of orchestration and form, aesthetics, and performance practices.

**MUHL 4009-6009. Choral Literature I. (3).** Survey of choral repertories from Gregorian chant to 1700; contemporary performance practices; techniques of performing early choral music with modern mixed choirs.

**MUHL 4010-6010. Choral Literature II. (3).** Survey of choral repertories from 1700 to present; contemporary performance practices; problems of modern performance.

**MUHL 4011-6011. String Quartet Literature. (3).** History of string quartet; Haydn to present; problems of performance.

**MUHL 4012-6012. History of Chamber Music for Wind Instruments. (3).** History of chamber music for brass and woodwind instruments for medieval through modern periods; instruments, types of ensembles, musical sources, notation, repertory, performance practice.

**MUHL 4013-6013. Women and Music. (3).** Investigation of roles women have played throughout history of Western art music; music composed, performed, inspired by women.

**MUHL 4014-6014. Chamber Music for Piano. (3).** Study of development of works for piano and one other instrument; piano trios, piano quartets; piano quintets; stylistic analyses of works from classic, romantic, and twentieth century repertory.

**MUHL 4020-6020. Solo Brass Literature. (3).** Examination, evaluation and critique of solo repertoire for brass instruments. Reference books and material will be examined as well as the development of specific courses of study for each instrument.

**MUHL 4021-6021. American Amateur Brass Band. (3).** History and circumstances of the American amateur band movement in the 19th and early 20th centuries; practical exploration of its musical repertory. PREREQUISITE: MUHL 3302, or permission of instructor.

**MUHL 4030-6030. Percussion Repertory. (3).** Survey of available literature for percussion instruments.

**MUHL 4259. Studies in Bibliography. (3).** Bibliographic techniques in music history; study and cataloguing of standard reference materials; research practices and ethics. Preparation of the Senior Project prospectus.

**MUHL 4260-69-6260-69. Special Topics in Music History. (1-3).** Topics are varied and in online class listings.

**MUHL 4406. Twentieth Century Music. (3).** Advanced study of music in its historical context from 1900 to the present.

**MUHL 4407-6407. The Opera and Music Drama. (3).** Survey of opera before Richard Wagner; Wagner's music dramas and operas of his contemporaries; dramatic and musical significance of each phase of development of two forms. PREREQUISITE: MUHL 3301, 3302, or permission of instructor.

**MUHL 4500-6500. String Repertory. (3).** Histories, texts, methods, periodicals, orchestral studies, and solo and ensemble literature of the individual string instruments. (A-F, IP)

**MUHL 4601. Comparative Arts. (3).** Cultural activities in their interrelation with each other and with corresponding historic and economic events. Open without prerequisite to non-music majors of junior and senior standing.

**MUHL 4800-6800. World Musical Styles. (3).** Musical styles and role of music performance in preliterate and folk societies throughout world. **(Sp).**

**MUHL 4801-6801. American Folk and Popular Music. (3).** Folk and popular elements in American music; role of mass media, especially phonograph record, in utilizing and changing folk music; historical development and interrelationships of various musical styles ranging from 19th century minstrelsy to roots of rock and roll; emphasis on southern Anglo-American and Afro-American folk and popular musical styles. **(F).**

**MUHL 4803. Individual Studies in Music History. (1-3).** Directed individual study in selected areas of music history chosen in consultation with instructor. May be repeated for a maximum of 6 hours credit with permission of director. (A-F, IP)

**MUHL 4804-6804. Blues. (3).** Stylistic development of blues music from its beginnings; its relationships to African-American and American culture and history. **(F).**

**MUHL 4805-6805. History of Rock and Roll. (3).** Stylistic origins and development of rock and roll music from its beginnings to the present.

**MUHL 4806-6806. History of Jazz. (3).** Stylistic origins and development of jazz; interaction of jazz and Western classical music styles.

**MUHL 4807-6807. Memphis Music. (3).** Most distinctive forms of folk and popular music in Memphis in the twentieth century; relationships to history, culture, and social patterns of the city and mid-south region; folk music background; blues, jazz, country music, gospel music, and rock and roll emphasized. **(Sp).**

**MUHL 4999. Senior Project in Music History. (3).** Integration course in which knowledge and skills developed in music theory, performance practice studies, and music history are utilized systematically in the preparation of a public presentation of musical and musicological interest and of accompanying descriptive paper. Taught as applied music, individual instruction. PREREQUISITE: a minimum of 6 hours in advanced music history courses and permission of the instructor. **[I]** (A-F, IP)

## (MUID) MUSIC INDUSTRY

**Rudi E. Scheidt School of Music**

PATRICIA HOY, D.M.A., *Director*
*Room 123B, Music Building*
*http://music.memphis.edu*

**MUID 1001. Introduction to Music Technology. (1). (CMUS).** Basic introduction to music technologies available to the musician; introduction to software, hardware, and basic tenets of MIDI sequencing, notation, composition, studio audio production CR ROM availability, CD/DVD technology. COREQUISITE: MUTC 1008.

**MUID 2201. Career Opportunities in Commercial Music. (2). (CMUS).** Exploration of career opportunities; examination of organization, structure, business relationships in commercial music industry; survey of internet media, record company operations, music publishing, artist management, music in advertising. This course is a prerequisite or corequisite for all courses in music business or recording technology.

**MUID 3103. Contemporary Songwriting and Production Techniques. (3). (CMUS).** Process of developing an idea into a commercially viable song and applying production techniques for maximum commercial potential. PREREQUISITE: MUTC 2103, or permission of instructor.

**MUID 3104. Artist Management and Media Promotion. (3). (CMUS).** Challenges involved in developing and managing career of contemporary recording artist; management issues, personal appearances, promotion, booking and agency, marketing, artist representation, public relations, merchandising, media production activity; current practices in exposing recordings and other music media to public; overview of manufacturing issues. PREREQUISITE: MUID 2201, MUID 3602.

**MUID 3505. Concert Promotion, Tour Management and Venue Administration. (3). (CMUS).** Fundamentals for managers of artists or performance venue; perspectives of promoter, artist, road manager, venue administrator; emphasis on publicity, promotion, union considerations, facility management, security, cash management, selection of program material; business analysis of budgeting, demographics, ticket services, pricing. PREREQUISITE: MUID 2201, 3602, ISDS 2710, ECON 2110, ECON 2120, MATH 1830. **[C]**

**MUID 3602. Recording Industry Contracts. (3). (CMUS).** Agreements concerning publishing, agency, management, recording, performing rights, promotion, merchandising, distribution, unions and attorneys.

**MUID 3800. Recording Studio Technology. (4). (CMUS).** Detailed examination of basic theory, operational concepts and technologies upon which modern audio production is based; exploration of creative production techniques used to enhance music recordings. PREREQUISITE: sophomore standing, completion of MATH 1830, TECH 1811, and permission of instructor.

**MUID 3801. Computer-Based Audio Production. (3). (CMUS).** Focus on needs of practicing audio engineer. Concepts and practices of using equipment commonly found in electronic music studios with emphasis on digital audio workstation; sampling, synthesis, MIDI, patching, editing, synchronization, signal processing and creative commercial production techniques. PREREQUISITE: computer literacy, MUID 3800 and permission of instructor. NOTE: Basic computer operations will not be covered. Students must be proficient with Macintosh or Windows environment including; basic system operations, data backup functions, file manipulation, data translation and common application programs.

**MUID 3802. Audio Production: Technology and Practice. (3). (CMUS).** Equipment, techniques, musical production values and technology commonly used in modern audio production. Designed to give music business major an understanding of production process and enhance studio musician's ability to provide creative services during recording sessions. PREREQUISITE: sophomore standing and permission of instructor.

**MUID 4201. Studies in Commercial Music. (1-3). (CMUS).** Class or supervised individual study of special problems in Commercial Music. May be repeated when course content varies. (A-F, IP)

**MUID 4260-6260. Special Topics in Commercial Music. (1-3).** Topics are varied and in online class listings.

**MUID 4603-6603. Copyright and Licensing. (3). (CMUS).** Detailed examination of intellectual property rights as they relate to commercial music industry; examination of publishing and its role on the control and exploitation of package of rights in music property; publishing activities, performing rights organizations, catalog sales and acquisitions, publisher/songwriter relations and royalty accounting; emphasis on practical applications. PREREQUISITE: MUID 2201, MUID 3602.

**MUID 4800. Studio Recording. (4). (CMUS).** Audio engineering on modern multi-channel recording equipment using commercial production techniques; emphasis on skills of console operation, microphone selection and placement, session set-up, preparing musical instruments for recording, editing, mixing and engineer's artistic involvement in project. PREREQUISITE: TECH 1811, MUID 3800, and permission of instructor. **(Sp).**

**MUID 4801. Problems in Commercial Music. (1-3). (CMUS).** Supervised independent study. May be repeated for a maximum of 9 hours credit, but not for purpose of changing original grade. PREREQUISITE: permission of instructor. (A-F, IP)

**MUID 4802. Advanced Recording. (4). (CMUS).** Advanced instruction in producing contemporary commercial recordings; application of production practice to recording assignments; advanced study of session technique, signal processing, mixing, editing, automation, synchronization, equipment and digital recording. PREREQUISITE: MUID 3801, 4800 and permission of instructor.

**MUID 4803. Advanced Media Production and Technologies. (4). (CMUS).** Comprehensive application of production techniques in audio recording, audio/video production and multimedia production; emphasis on artistic sensitivity, musicality and aural imagery. PREREQUISITE: MUID 4802 and permission of instructor. PREREQUISITE or COREQUISITE: COMM 4825. Completion of JOUR 3900 and 4900 preferred.

**MUID 4806. Fundamentals of Concert Sound Reinforcement. (3). (CMUS).** Basic equipment and production techniques for providing live sound services; methods for handling various sized groups in diverse locations. PREREQUISITE: MUID 4800 and permission of instructor.

**MUID 4810. Audio Production Practicum. (1-3). (CMUS).** Supervised audio production activities. May be repeated for a maximum of 9 hours credit but not for the purposes of changing the original grade. PREREQUISITE: MUID 4800 and permission of instructor. (A-F, IP)

**MUID 4811. Studio Maintenance Practicum. (1-3). (CMUS).** Trouble-shooting and maintenance activities under the supervision of studio staff. A minimum of 42 clock hours of service for each credit hour is required. May be repeated for a maximum of 9 hours credit but not for the purpose of changing the original grade. PREREQUISITE: MUID 4800 and permission of instructor. (A-F, IP)

**MUID 4812. Concert Sound Practicum. (1-3). (CMUS).** Diverse live sound reinforcement activities. A minimum of 42 clock hours of service for each credit hour is required. May be repeated for a maximum of 9 hours credit but not for the purpose of changing the original grade. PREREQUISITE: MUID 4800, 4806 and permission of instructor. (A-F, IP)

**MUID 4820. International Music Business. (3). (CMUS).** Expands upon fundamental of domestic music business practice covered in previous classes through examination of business practices and infrastructure which drives global music marketplace; emphasis on cultural, media business, legal aspects affecting music industry and its global audience. PREREQUISITE: MUID 2201, 3602, 4603, senior standing and permission of instructor.

**MUID 4830. Trends in Business Practices and Technology. (3). (CMUS).** Supervised directed study in cutting-edge business practices and technologies impacting the recording industry; emphasis on commercial viability and business impact. Formal presentation of research required. PREREQUISITE: MUID 2201, 3602, 4603, junior standing and permission of instructor.

**MUID 4840. Entrepreneurship in Commercial Music. (3). (CMUS).** Analysis of business practice for student to form own music business entity; types of music business entities, music business plans, liability issues, publicity, promotion; issues related to formation of music business. PREREQUISITE: COMM 3602, COMM 3603, COMM 4830, senior standing and permission of instructor.

**MUID 4850. Record Company Operations. (3). (CMUS).** Participation in core operations of one of The University of Memphis' record labels. PREREQUISITE: minimum GPA of 2.8, MUID 2201, 3602, 4603, junior standing and permission of instructor.

**MUID 4898. Senior Project in Music Business or Recording Technology. (4). (CMUS).** Comprehensive final project which demonstrates mastery of creative, technical, and business elements of commercial music industry. Intended to be taken during the student's last semester before graduation. PREREQUISITE: senior standing and permission of instructor. **[I]** (A-F, IP)

**MUID 4899. Internship. (1-3). (CMUS).** One semester of supervised field work experience in selected areas of the commercial music industry. A minimum of 42 clock hours of service for each credit hour is required. May be repeated for a maximum of 9 hours credit but not for the purpose of changing the original grade. PREREQUISITE: placement interview and permission of instructor. (A-F, IP)

## (MUS) MUSIC HISTORY, LITERATURE, AND APPRECIATION

### Rudi E. Scheidt School of Music

PATRICIA HOY, D.M.A., *Director*
*Room 123B, Music Building*
*http://music.memphis.edu*

**MUS 1030. Music Appreciation. (3). (MUHL 1101).** Music of various Western and non-Western cultures and historical periods, including the creative process, the formal elements of music and musical styles, genres, and media. Attendance at some concerts required. NOTE: May not be used to satisfy requirements for degrees in Music. **[G]** ♦

## (MUSA) SACRED MUSIC

### Rudi E. Scheidt School of Music

PATRICIA HOY, D.M.A., *Director*
*Room 123B, Music Building*

**MUSA 4104-6104. Sacred Music in History and Practice I. (3).** Survey of Jewish and Christian sacred music, exploring origins of styles, traditions, and current practices. PREREQUISITE: MUTC 2008. **(F-alternate years).**

**MUSA 4105-6105. Sacred Music in History and Practice II. (3).** PREREQUISITE: MUTC 2008. **(Sp - alternate years).**

**MUSA 4106-6106. Children's Choirs in the Church. (3).** Organization and development of a children's choir program in the church; rehearsal techniques; literature; vocal development; recruiting; contemporary approaches. **(F).**

**MUSA 4107-6107. Service Playing for Organists. (3).** Playing of hymns and accompaniments, adaptation of piano and orchestra accompaniments, basic improvisation. PREREQUISITE: Upper division standing in organ or permission of instructor. **(Sp-alternate years).**

**MUSA 4260-69-6260-69. Special Topics in Sacred Music. (1-3).** Topics are varied and in online class listings.

**MUSA 4801-6801. Individual Studies in Sacred Music. (1-3).** Directed individual study in selected areas of music chosen in consultation with instructor. May be repeated for 6 hours credit with permission of school director. (A-F, IP)

## (MUSE) MUSIC EDUCATION

### Rudi E. Scheidt School of Music

PATRICIA HOY, D.M.A., *Director*
*Room 123B, Music Building*

**FIELDS OF ENDORSEMENT FOR TEACHING:** For students in the School Music Concentration of the Bachelor of Music in Music degree, endorsement may be obtained in Instrumental Music and in Vocal Music. Normally, a student can expect to be recommended in only one of these areas. Vocal Music applicants should be able to play piano accompaniments of moderate difficulty, should possess an adequate solo voice for school music purposes, and should schedule a variety of large choral ensembles. Instrumental Music applicants should study one instrument of major emphasis and participate in large instrumental ensembles. Students in either area may satisfactorily meet piano and voice requirements with completion of MUSE 2108 and MUSE 1113 and their prerequisites. A graduation recital is required in both areas.

**MUSE 1101. Class Instruction in Brass Instruments. (1).** Basic performance skills and teaching techniques on trumpet, trombone, French horn, baritone horn and tuba for those who intend to teach instrumental music in schools. **(Sp).**

**MUSE 1103. Class Instruction in Percussion Methods. (1).** Basic performance skills and teaching techniques on snare drum, timpani, and keyboard percussion instruments for those who intend to teach instrumental music in schools. **(F).**

**MUSE 1104. Class Instruction in Woodwind Instruments. (1).** Basic performance skills and teaching techniques on clarinet, flute, saxophone, oboe, and bassoon for those who intend to teach instrumental music in schools. **(Sp).**

**MUSE 1112. Class Instruction in Voice. (1).** Fundamentals of vocal production useful for all music teachers.

**MUSE 1116. Class Instruction in Stringed Instruments. (1).** Basic performance skills and teaching techniques on violin, viola, cello, and double bass for those who intend to teach instrumental music in schools. **(F).**

**MUSE 1118. Class Instruction in Guitar for Non-Music Majors. (2).** Beginning instruction in classical guitar for non-music majors; development of basic reading and performance skills.

**MUSE 1119. Guitar for the Classroom Music Teacher. (1).** Basic guitar technique, chording and folk-style accompaniments; prepares students for effective teaching in general music classes.

**MUSE 2002. Foundations of Music Education. (3).** Development of philosophical foundation for music education professionals; values, attitudes and work habits of the effective teacher will be stressed; field experiences and techniques of observation.

**MUSE 2100. Music Education Performance Lab. (1).** Performance, observation and application of rehearsal techniques, conducting skills, psychology and repertoire in instrumental or choral group setting.

**MUSE 3101. Functional Keyboard Skills. (1).** Functional keyboard harmony and sight reading skills designed for keyboard majors.

**MUSE 3700. Basic Conducting. (2).** Development of conducting skills; basic baton principles, rhythmic analysis, expressive techniques, phrasing, and multimetered problems; class meetings require performing as instrumentalist or vocalist as well as conductor. *Three class hours per week.* **(F).** PREREQUISITE: MUTC 3008.

**MUSE 3702. Score Reading. (3).** Realization of open score at the keyboard; vocal scores, small orchestra and large orchestra scores; clefs, transpositions, etc.; employing literature from various periods of music history.

**MUSE 4201-6201. Individual Studies in Music Education. (1-3).** Individual study of problems and opportunities faced by person who teaches music in schools; for classroom teachers, music teachers, supervisors, principals, and administrators. May be repeated for a maximum of 6 hours credit but not for the purpose of changing a previous grade. (A-F, IP)

**MUSE 4205-6205. Marching Band Techniques. (2).** Organizing and conducting the marching band, gridiron charting and marching procedures with a study of precision drill, formations and pageantry. PREREQUISITE: permission of the instructor. **(Sp).**

**MUSE 4208-6208. Band Literature. (3).** History and evolution of wind instruments and wind instrument playing and the history and development of the wind band and its literature, with general background material on the specific composers involved. **(Sp).**

**MUSE 4209-6209. Piano Tuning and Repair. (2).** Concentrated study of basic techniques involved in piano tuning and adjustment. Some basic tools required.

**MUSE 4210. Jazz Ensemble Techniques. (2).** Knowledge of jazz phrasing, articulation, proper ensemble settings, chord/scale relationships, selection of appropriate repertoire and administration of the school jazz program.

**MUSE 4211. Vocal Diction I. (2).** Phonetic study of Latin, English and German languages in detail; introduction and basic rules of Italian pronunciation; International Phonetic Alphabet transcription of songs and arias and class performance. **(Offered alternate years).**

**MUSE 4212. Vocal Diction II. (2).** Phonetic study of Italian, French, and Spanish in detail, including IPA transcription of songs and arias and class performance. Other languages (Russian, Hebrew, etc.) may be covered as time permits. **(Offered alternate years).**

**MUSE 4213. Materials and Methods of General Music. (3). (4203).** Philosophy, methods and materials for general music in grades K-12; demonstration and simulation of classroom teaching; observation and teaching of mini-lessons in school music settings. **(F).**

**MUSE 4260-69-6260-69. Special Topics in Music Education. (1-3).** Topics are varied and in online class listings.

**MUSE 4403. Materials and Methods of Instrumental Music 9-12. (3).** Designed to prepare the instrumental music teacher to teach music concepts to intermediate and advanced players in mixed instrumental group settings. Instruction methodologies and materials, objectives, evaluation, motivation, and administration stressed. PREREQUISITE: junior standing in music. **(F).**

**MUSE 4405. Materials and Methods of Choral Music 7-12. (3).** Selected materials and methods of practical concern to the vocal-choral music specialist; consideration of music series, scheduling, voice class development, choral publishers; observation and teaching of mini-lessons in secondary school setting. PREREQUISITE: junior standing in music. **(F).**

**MUSE 4501-6501. Piano Pedagogy I. (2).** Training teachers for beginning through intermediate level piano instruction; establishing strong artistic, musical and technical foundations. PREREQUISITE: permission of instructor. **(F).**

**MUSE 4503-6503. Piano Pedagogy II. (2).** Training teachers for advanced piano instruction; extensive readings from renowned artist-teachers and performers; development of ideation and memorization skills; observations and supervised practice teaching. PREREQUISITE: MUSE 4501, or permission of instructor. **(Sp).**

**MUSE 4505-6505. Collaborative Piano Techniques. (2).** Performance class involving practical study of instrumental and vocal standard repertory and the problems of ensemble playing; facility in sight-reading and ability to assimilate music rapidly; score-reading, transposition, and figured bass realization introduced as skills necessary to well rounded musicianship. PREREQUISITE: permission of instructor. **(Sp).** (A-F, IP)

**MUSE 4506. Introduction to Suzuki Talent Education for Strings. (3).** Required of students who plan to serve as apprentice string teachers in U of M Suzuki Talent Education program. Basic instruction in Suzuki philosophy; participation with parents and children in Suzuki string classes.

**MUSE 4508-6508. Principles of Suzuki Piano. (3).** Suzuki philosophy applied to development of the child's abilities and role of teacher and parent. Students will analyze technical and musical instruction of beginning piano student. PREREQUISITE: upper division piano skills. **(F).**

**MUSE 4509. Suzuki Violin Literature and Techniques I. (3).** Literature and technique taught in Suzuki Violin School; fundamental technique, development of posture, tone and listening ability in beginning students; analysis of pedagogical material. Required of students who plan to serve as apprentice teachers in U of M Suzuki String Program. PREREQUISITE: MUSE 4506.

**MUSE 4510. Advanced Suzuki String Pedagogy. (3).** Literature and technique taught in Suzuki Violin School; emphasis on development of advanced student; laboratory experience in U of M Suzuki String Program. Required of students planning to be apprentice teachers in U of M Suzuki String Program. PREREQUISITE: MUSE 4509.

**MUSE 4511-6511. Class Piano Pedagogy. (3).** Group instruction techniques in teaching of beginning, intermediate, and early advanced piano; emphasizes observation and practical application. For the piano major and/or prospective piano teacher. PREREQUISITE: upper division level in keyboard, or permission of instructor. **(Sp).**

**MUSE 4512-6512. Jazz Pedagogy for Music Educators. (3).** Design and implementation of a comprehensive jazz curriculum, either at secondary or college level; teaching methodology in all disciplines of the jazz idiom. PREREQUISITE: advanced standing and permission of instructor.

**MUSE 4513. Suzuki Violin Literature and Technique II. (3).** Analysis of pedagogical materials and techniques introduced in volumes five and six of Suzuki Violin School. PREREQUISITE: MUSE 4509.

**MUSE 4514-6514. Brass Pedagogy. (3).** Examination of current literature, principles, methods and psychology in brass playing and teaching. Students will participate in videotaped teaching assignments that will be used to improve one-to-one teaching skills in the studio setting.

**MUSE 4520-6520. Percussion Pedagogy. (3).** Selected pedagogical topics relating to teaching of percussion instruments.

**MUSE 4700. Instrumental Conducting. (2).** Various problems encountered in preparation and conducting of instrumental scores; individual practice with opportunity for each student to conduct instrumental groups. *Three class hours per week.* PREREQUISITE: MUSE 3700.

**MUSE 4701. Choral Conducting. (2).** Various problems encountered in preparing and conducting traditional and contemporary vocal scores; rehearsal techniques; individual practice with laboratory groups. *Three class hours per week.* PREREQUISITE: MUSE 3700.

**MUSE 4802-6802. Level I Orff-Schulwerk. (1-3).** Basic Orff-Schulwerk techniques including body movement, soprano recorder, percussion, vocal performance, improvisation and arranging. PREREQUISITE: junior standing in music education, or equivalent experience.

**MUSE 4911. Student Teaching in Music. (9).** Full-time planned and supervised teaching experience in music providing opportunities to synthesize knowledge and skills and demonstrate professional competencies in educational settings. PREREQUISITE: approval of music education faculty. COREQUISITE: MUSE 4999.

**MUSE 4999. Professional Seminar. (3).** Seminar taken concurrently with student teaching requiring students to analyze current practices, solve problems, review timely material pertinent to field of music education; emphasis on addressing concerns and questions arising in student teaching settings. COREQUISITE: MUSE 4911.

## (MUTC) MUSIC THEORY AND COMPOSITION

### Rudi E. Scheidt School of Music

PATRICIA HOY, D.M.A., *Director*
*Room 123B, Music Building*
*http://music.memphis.edu*

Placement in the Music Theory sequence for undergraduates will be determined through examination. NOTE: Courses in Composition and Electronic Music may be repeated for credit but not for the purpose of improving the grade originally earned.

**MUTC 1001. Basic Music Theory. (3).** For students who plan to major in music but do not meet minimum standards for MUTC 1008. Not allowable as credit toward the satisfaction of requirements for the major or minor. *Two laboratory hours per week.*

**MUTC 1008. Music Theory I. (3).** Basic notation, scales, intervals, triads, key signatures; analysis and exploration of technical material and written exercises in historical areas of plain chant through late 16th century. PREREQUISITE: Theory placement exam. COREQUISITE: MUTC 1010.

**MUTC 1009. Music Theory II. (3).** Four part structures, all seventh chords, chorale harmonization figured bass realization; analysis and written exercises from historical area of early 17th century through J. S. Bach. PREREQUISITE: MUTC 1008, 1010. COREQUISITE: MUTC 1011.

**MUTC 1010. Aural Theory I. (1).** Beginning ear training; scales, intervals, triads, simple melodic lines and simple two part examples, sightsinging of combination of tonal and modal materials. PREREQUISITE: Theory placement exam. COREQUISITE: MUTC 1008. (S/U)

**MUTC 1011. Aural Theory II. (1).** Ear training involving triads in sequence, two part examples, modulatory melodies; sightsinging of 17th and 18th century melodic examples. PREREQUISITE: MUTC 1010, 1008. COREQUISITE: MUTC 1009. (S/U).

**MUTC 1012. Musicianship I. (3).** Fundamentals of music theory, including notation, pitch, rhythm and meter, scales, modes, intervals, melodic structure, basic forms, improvisation; aural skills, melodic sightsinging; melodic, intervallic, rhythmic dictation; simple two-part structures.

**MUTC 1013. Musicianship II. (3).** Functional harmony, triadic inversion, seventh chords, cadence, voice leading; analytic procedures form common practice and popular repertoires; functional harmonic progressions. PREREQUISITE: MUTC 1012.

**MUTC 2008. Music Theory III. (3).** Continuation of four part structure, part writing and figured bass; expanded harmonic materials from ninth chords through chordal mutation; formal and chordal analysis from Bach through mid-19th century. PREREQUISITE: MUTC 1009, 1011. COREQUISITE: MUTC 2010.

**MUTC 2010. Aural Theory III. (1).** Ear training involving expanded harmonic materials, modulatory melodies, two part examples with modulation; sightsinging of 18th and 19th century melodic examples. PREREQUISITE: MUTC 1011, 1009. COREQUISITE: MUTC 2008. (S/U)

**MUTC 2012. Musicianship III. (3).** Advanced functional harmony, secondary function, modulation, altered chords, chromatic chords, Neopolitan sixth, augmented sixth, mixture; advanced functional harmonic progressions. PREREQUISITE: MUTC 1012, MUTC 1013.

**MUTC 2013. Musicianship IV. (3).** Expanded tonality, modal impressionist and jazz harmony, extended chords (11th, 13th), tonality in popular idioms, bitonality, polytonality, non-triadic chord constructions; overview of 20th century compositional techniques, basic orchestration; electronic compositional procedures. PREREQUISITE: MUTC 2012.

**MUTC 2103. Music Theory: Jazz/Pop/Commercial I. (3). (CMUS 2101).** Basic harmonic structures, chord symbol realization, altered scales and modes, altered and extended chords, notation, articulation, rhythmic patterns; analysis of written and recorded jazz and pop music; transcription of recorded materials. *Three lecture hours, one laboratory hour per week.* **(F).** PREREQUISITE: MUTC 1009, MUAP 1116.

**MUTC 2104. Music Theory: Jazz/Pop/Commercial II. (3). (CMUS 2102).** Altered scales and modes, altered and extended chords, chromatic progressions, mediant relationships, poly-harmony and panchromaticism. *Three lecture hours, one laboratory hour per week.* PREREQUISITE: MUTC 2103. **(Sp).**

**MUTC 2501. Composition. (3).** Class instruction in free composition; emphasis on smaller forms. May be repeated for additional credit. PREREQUISITE: MUTC 1008. NOTE: Composition taught as applied music. Students receive the equivalent of one half-hour lesson per week. Fee for this instruction is $50 per semester.

**MUTC 2502. Composition. (3).** Works for piano, voice, chorus, and small ensembles; study of style and analysis of works from music literature. May be repeated for additional credit. PREREQUISITE: MUTC 2501 or permission of instructor. NOTE: Composition is taught as applied music. Students receive equivalent of one hour lesson per week. Fee for this instruction is $100 per semester.

**MUTC 2503. Composition/Arranging: Jazz/Commercial I. (2). (CMUS 2501).** Emphasis on small instrumental and vocal works, basic style and form. May be repeated for a maximum of 6 hours credit. PREREQUISITE: MUTC 2501, or permission of instructor.

**MUTC 2504. Composition/Arranging: Jazz/Commercial II. (2). (CMUS 2502).** Emphasis on stage and jazz band arranging techniques. May be repeated for a maximum of 6 hours credit. PREREQUISITE: MUTC 2503, or permission of instructor.

**MUTC 2511. Introductory Electronic Music. (2).** Basic concepts of contemporary digital electronic music techniques including synthesizer operation, MIDI sequencing, and sampling and music notation by computer. PREREQUISITE: MUTC 2008, or permission of instructor. FEE: $50. (A-F, IP)

**MUTC 3008. Music Theory IV. (3).** Continuation of late 19th century harmonic structures; introduction of popular music and its notational symbols; introduction and use of 20th century techniques analysis and written examples from 20th century. PREREQUISITE: MUTC 2008, 2010. COREQUISITE: MUTC 3009. **[C]**

**MUTC 3009. Aural Theory IV. (1).** Ear training involving expanded 19th century harmonic considerations, 20th century chromaticism and pandiatonicism, two part examples from both 19th and 20th centuries; sight-singing emphasizing melodies of 20th century. PREREQUISITE: MUTC 2010, 2008. COREQUISITE: MUTC 3008. (S/U)

**MUTC 3010. Aural Theory V. (1).** Aural exploration of basic forms, cadences and styles of music; detailed aural analysis of modulatory elements within a piece. PREREQUISITE: MUTC 3008, 3009. (S/U) **(F).**

**MUTC 3101. Orchestration. (3).** Basic study of instruments of orchestra and band, terminology and techniques pertaining to that study; practical application by scoring for small and large instrumental combinations **(F).** PREREQUISITE: MUTC 3008, 3009, or permission of instructor.

**MUTC 3102. Advanced Musical Analysis I. (3).** Advanced theoretical analysis of large-scale compositions from late Medieval through early Classic periods; in-depth study of stylistic characteristics and theoretical techniques used in pieces studied PREREQUISITE: MUTC 3008, 3009. **(F-even years). [W]**

**MUTC 3109. Advanced Musical Analysis II. (3).** Advanced theoretical analysis of large-scale compositions from late Classic period through very recent works in last decade of twentieth century; in-depth study of stylistic characteristics and theoretical techniques used in pieces studied. PREREQUISITE: MUTC 3008, 3009. **(Sp-odd years).**

**MUTC 3201. Jazz Arranging/Orchestration. (3). (CMUS).** Arranging/orchestration for small to large ensembles in jazz and commercial music styles; idiomatic problems with vocalists, rhythm, electronic, wind, and string instruments in various jazz styles. PREREQUISTE: MUTC 2103.

**MUTC 3501. Composition/Arranging: Jazz/Commercial III. (2). (CMUS).** Individual instruction for mixed ensembles and studio groups in various jazz and studio styles, standard and extended forms; introduction to line writing. May be repeated for additional credit. NOTE: Composition is taught as applied music. Students receive the equivalent of one hour lesson per week. Fee for this instruction is $100.00 per semester. PREREQUISITE: MUTC 2504, or permission of instructor.

**MUTC 3825. Materials and Techniques of Improvisation I. (3). (CMUS).** Development of improvisation skills on solo instruments or voice; basic chord patterns, scales, arpeggios; performance with rhythm section. **(F).** PREREQUISITE: MUTC 2104, or permission of instructor.

**MUTC 3826. Materials and Techniques of Improvisation II. (3). (CMUS).** Analysis of melodic structures; motivic fragmentation and sequencing; extended harmonic structures, performance in small combo settings. **(F).** PREREQUISITE: MUTC 3825, or permission of instructor.

**MUTC 3827. Materials and Techniques of Improvisation III. (3). (CMUS).** Analysis and performance of music in standard styles, including bebop, Latin, fusion, and jazz/rock; contemporary mainstream, pan-chromatic, and free-form improvisation; performance with combos and large jazz ensembles. PREREQUISITE: MUTC 3826, or permission of instructor. **(F).**

**MUTC 3828. Aesthetics and Analysis of Jazz and Commercial Music Styles. (2). (CMUS).** Fundamentals of form and style analysis; study of the artistic and commercial intentions and appropriateness of music from early popular styles to the present. PREREQUISITE: MUTC 2104, or permission of instructor. **(Sp).**

**MUTC 4106. (4101). Compositional Processes of the Twentieth Century. (3).** Analysis and imitative writing of major composers of the twentieth century, from Debussy through the present. **(Sp-even years).**

**MUTC 4107-6107. Composer's Workshop: Jazz/Commercial. (3). (CMUS 4102).** Composition/arranging for various sizes of instrumental and vocal groups with emphasis on commercial writing; projects in record copies, horn and string tracks, background vocals, instrumental accompaniment for vocal solos, jingles, and radio station ID's. PREREQUISITE: MUTC 2104, 2504, or permission of instructor. **(Sp–odd years).**

**MUTC 4202-6202. Seminar: Music Theory and Analysis. (3).** Advanced course in theory, counterpoint, and analysis of literature. Contrapuntal and harmonic techniques; research; theoretical problems from pedagogical point of view; writing in strict and free styles. Recommended as review course for graduate students. PREREQUISITE: permission of instructor. **(F).**

**MUTC 4204. Individual Studies in Music Theory and Composition. (1-3).** Directed individual study in selected areas of music theory and composition chosen in consultation with instructor. May be repeated for credit but not for the purpose of changing a grade. (A-F, IP)

**MUTC 4205. Sixteenth Century Counterpoint. (3).** Study of contrapuntal techniques of the 16th century. **(Sp-odd years).**

**MUTC 4206. Eighteenth Century Counterpoint. (3).** Study of contrapuntal techniques of the 18th century. **(F-even years).**

**MUTC 4207. Twentieth Century Counterpoint. (3).** Study of contrapuntal techniques of the 20th century. **(F-odd years).**

**MUTC 4208. Analytical Techniques. (3).** Techniques of analysis of styles and structure of music from all periods of history of music. **(Sp-odd years).**

**MUTC 4209. Advanced Orchestration. (3).** Continuation of MUTC 3101. Orchestration of works from nineteenth and twentieth centuries for full orchestra; study of representative orchestral scores from romantic and contemporary periods. PREREQUISITE: MUTC 3101.

**MUTC 4260-69-6260-69. Special Topics in Theory and Composition. (1-3).** Topics are varied and in online class listings.

**MUTC 4501-6501. Composition. (3).** Composition in varied forms for large and small ensembles and solo instruments; analysis of contemporary works and practical application of techniques. May be repeated for additional credit. NOTE: Composition taught as applied music. Students receive equivalent of one hour lesson per week. Fee for this instruction is $100.00 per semester. PREREQUISITE: recommendation of upper division examining committee. (A-F, IP)

**MUTC 4502. Composition for Non-Composition Majors. (3).** Class instruction in free composition for students not majoring in composition; practical experience in idea generation, form, development, and instrumentation. NOTE: Composition taught as applied music. Students receive equivalent of one half-hour lesson per week. Fee for this instruction is $50 per semester. PREREQUISITE: MUTC 3008. (A-F, IP)

**MUTC 4503. Composition/Arranging: Jazz/Commercial IV. (3). (CMUS 4501).** Individual instruction with emphasis on advanced line writing, fusion and contemporary mainstream styles, writing for full studio orchestra. May be repeated for additional credit. NOTE: Composition is taught as applied music. Students receive the equivalent of one hour lesson per week. Fee for this instruction is $100.00 per semester. PREREQUISITE: MUTC 3501, or permission of instructor. (A-F, IP)

**MUTC 4504-6504. Introduction to Film/Video Scoring. (3). (CMUS 4502).** Basic problems of writing music for film and video: commercial and industrial productions, shorts and full length features, selection of appropriate styles, creating a master music list, writing from a cue sheet; introduction to editing room equipment: conversion of film frames to video, use of SMPTE time code and synchronization equipment, MIDI sequencer scoring from a digital audio workstation; project assignments in film and video formats. PREREQUISITE: MUTC 2511, MUTC 3501, and either MUID 3801 or MUTC 4511 or 4505, or permission of instructor. **(Offered alternate years).**

**MUTC 4511. Intermediate Electronic Music. (2).** Concepts of contemporary digital electronic music techniques including synthesizer operation, MIDI sequencing, and sampling as well as music notation by computer. The two hours credit earned from this course may be used as composition credit toward the composition concentration. FEE: $100. PREREQUISITE: MUTC 2008, or permission of instructor. (A-F, IP)

**MUTC 4512. Advanced Electronic Music. (2).** Continuation of MUTC 4511; emphasis on individual compositional projects; investigation of electronic music possibilities of the Internet. May be repeated for credit, but only two hours may be used as composition credit in composition concentration. FEE: $100. PREREQUISITE: MUTC 4511. (A-F, IP)

**MUTC 4599. Senior Composition Recital. (4).** Integration course for which students prepare and present a concert of their music and an accompanying descriptive paper. Taught as applied music, individual instruction. PREREQUISITE: a minimum of 4 hours in MUTC 4501and permission of the instructor. **[I]** (A-F, IP)

**MUTC 4896. Senior Project: Jazz and Studio Composition/Arranging. (4) (CMUS).** Project must include original compositions and original arrangements of existing compositions in a variety of styles. Project should include live performance, recorded album tracks, and film music. PREREQUISITE: MUTC 4503, 4504, or permission of instructor. (A-F, IP) [I]

## (NAVY) NAVAL SCIENCE

COMMANDER TIM FERREE, USN, *Professor of Naval Science*
*Room 120A, Hayden Hall*

*http://www.people.memphis.edu/~navallib/*

**NAVY 1100. Navy Laboratory. (1).** Two laboratory hours per week. **[G]**

**NAVY 1101. Introduction to Naval Science. (2).** Orientation and concepts of seapower; mission, organization, and warfare components of the Navy and Marine Corps. COREQUISITE: NAVY 1100.

**NAVY 1104. Navy Laboratory. (1).** *(Two laboratory hours per week.* **[G]**

**NAVY 1105. Seapower and Maritime Affairs. (3).** U.S. naval history from the Revolution to the present with emphasis on major developments; present day concerns in seapower and maritime affairs. COREQUISITE: NAVY 1104.

**NAVY 2204. Navy Laboratory. (1).** *Two laboratory hours per week.* **[G]**

**NAVY 2205. Naval Ships Systems I-Engineering. (3).** Ship characteristics and types including ship design, hydrodynamic forces, stability, compartmentation, propulsion, electrical and auxiliary systems, interior communications, ship control, and damage control. COREQUISITE: NAVY 2204.

**NAVY 2206. Navy Laboratory. (1).** *Two laboratory hours per week.* **[G]**

**NAVY 2401. Naval Leadership and Management. (2).** Advanced study of organizational behavior and management in the context of the naval organization. Practical applications are explored by the use of experiential exercises, case studies, and laboratory discussions. COREQUISITE: NAVY 2206.

**NAVY 3000. Naval Science Institute (NSI). (8).** Intensive six-week professional academic and training program conducted each summer at a naval installation by the Chief of Naval Education and Training for students entering the two-year NROTC Programs. The Naval Science Institute is the equivalent of the NROTC Basic Course. **[G]** (A-F, IP)

**NAVY 3301. Navigation and Naval Operations I. (3).** Piloting and celestial navigation including theory, principles, and procedures, use of charts, visual and electronic aids, and the theory and operation of magnetic and gyro compasses. *Three class hours and two hours of Navy Laboratory* per week.*

**NAVY 3302. Navigation and Naval Operations II. (3).** International and inland rules of the nautical road, relative-motion vector-analysis theory, relative motion problems, formation tactics, and ship employment. *Three class hours and two hours of Navy Laboratory* per week.*

**NAVY 3310. Evolution of Warfare. (3).** Historical development of warfare from the beginning of recorded history to the present focusing on the impact of major military theorists, strategists, tacticians, and technological developments. *Three class hours and two hours of Navy Laboratory* per week.*

**NAVY 4000. Marine Corps Leadership Training. (6).** Summer instruction ("Bulldog") conducted at the Marine Corps Officer Candidate School, Quantico, Virginia. Intensive six-week professional training program for Marine Option Junior Midshipmen; Marine Corps history and tradition, leadership under high stress situations, and effective management of men and materials in simulated combat conditions. (A-F, IP)

**NAVY 4207. Naval Ships Systems II-Weapons. (3).** Theory and employment of weapons systems. Processes of detection, evaluation, threat analysis, delivery, guidance, and explosives. *Three class hours of Navy Laboratory* per week.*

**NAVY 4402. Naval Leadership and Ethics. (2).** Naval junior officer responsibilities in naval administration; builds on and integrates the professional competencies developed in prior course work and professional training. *Two class hours and two hours of Navy Laboratory* per week.*

**NAVY 4410. Amphibious Warfare. (3).** Historical survey of the development of amphibious doctrine and the conduct of amphibious operations. Emphasis is placed on the evolution of amphibious warfare in the 20th century, especially during World War II. *Three class hours and two hours of Navy Laboratory* per week.*

***Navy Laboratory.** Focuses on the requisite moral, leadership and physical qualifies for becoming a commissioned officer.

## (NURS) NURSING

TONI BARGAGLIOTTI, D.N.Sc., *Dean*
*Newport Hall*

*http://nursing.memphis.edu*

*or*

*http://www.people.memphis.edu/~uomlson*

* NOTE: In the repetition of NURS courses for the purpose of achieving a satisfactory grade, the theory and corequisite practicum/skills courses are treated as one course. All must be taken to improve the grade in any of the two/three courses. A maximum of one nursing course may be repeated. A student who drops or withdraws from a nursing course may re-enter that course only once.

*Additional fees are charged for some Nursing courses.* See the online class listing or Fees in The Loewenberg School of Nursing section of the Bulletin.

**NURS 2217. Foundations of Nursing. (3).** Introduction to nursing process and concepts basic to practice of professional nursing; focus on development of nursing knowledge necessary for promotion of health and prevention of illness in individual. *Three lecture hours per week.* PREREQUISITE: admission to the Loewenberg School of Nursing. COREQUISITE: NURS 2218, *2219, 2220, 3000, 3101, 3400.

**NURS 2218. Integrative Skills I. (1).** Laboratory experiences focus on development of competency in performing basic clinical nursing procedures. *Three laboratory hours per week.* PREREQUISITE: admission to the Loewenberg School of Nursing. COREQUISITE: NURS 2217, 2219, 2220, 3000, 3101, 3400.

**NURS 2219. Foundations of Nursing Practicum. (2).** Clinical experiences include provision of direct care of adult clients in secondary care and/or extended care settings. *Six clinical laboratory hours per week.* PREREQUISITE: admission to the Loewenberg School of Nursing. COREQUISITE: NURS *2217, 2218, 2220, 3000, 3101, 3400. (S/U)

**NURS 2220. Dosage Calculation. (1).** Introduction to systems of measurement used in medication administration; ability to determine safe dosages for all types of medications and intravenous fluids. *One lecture hour per week.* PREREQUISITE: MATH Requirement; CHEM 1010, 1020.

**NURS 3000. Pharmacology in Nursing. (3).** Basic pharmacology of drugs in the major classifications; emphasis on action of a prototype on organ systems, its mechanisms of action, pharmacokinetics, toxicology and clinically important interactions with other drugs. PREREQUISITE: BIOL 2010/2011, 2020/2021, CHEM 1010, 1020, MMCS 1230/1231.

**NURS 3001. Individualized Study. (1-3).** Directed individualized approach to increase nursing knowledge, understanding, and skills according to student's needs and level objectives. Assessment of student determines content areas and clinical experience needed. May be repeated for a maximum of 6 hours credit. Credit not applied toward B.S.N. degree. (A-F, IP)

**NURS 3003. Computers and Nursing. (3).** Introduction to history of computers and information systems; emphasis on nursing practice and patient care applications; social, ethical, and legal issues; use and evaluation of software relevant to nursing.

**NURS 3101. Health Assessment. (3).** Comprehensive health assessment of clients across life span; expands interviewing and history taking; health assessment skills emphasized. *Two lecture hours, three laboratory hours per week.* COREQUISITE: NURS 2217, 2218, 2219.

**NURS 3107. Foundations of Professional Nursing for RNs. (1).** Introduction to concepts basic to practice of professional nursing; special attention to developing student skills necessary to meet intellectual expectations of the University and nursing profession. PREREQUISITE: admission to the Loewenberg School of Nursing. COREQUISITE: NURS 3003, or computer literacy.

**NURS 3117. Adult Health Nursing. (3).** Application of nursing process to adults experiencing problems of adaptation requiring nursing intervention in acute and/or chronic illness; role of nurse in health promotion, restoration, and rehabilitation is emphasized. *Two lecture hours per week.* PREREQUISITE: NURS 2217, 2218, 2219, 2220, 3000, 3101, 3400. COREQUISITE: *NURS 3118, 3119.

**NURS 3118. Integrative Skills II. (1).** Laboratory experiences focus on development of competency in performing complex clinical nursing procedures. *Three laboratory hours per week.* PREREQUISITE: NURS 2217, 2218, 2219, 2220, 3000, 3101, 3400. COREQUISITE: NURS 3117, 3119.

**NURS 3119. Adult Health Nursing Practicum. (2).** Clinical experiences include provision of direct care of adult clients and their families in secondary care settings. *Six clinical hours per week.* PREREQUISITE: NURS 2217, 2218, 2219, 2220, 3000, 3101, 3400. COREQUISITE: *NURS 3117, 3118. (S/U).

**NURS 3127. Psychiatric Mental Health Nursing. (3).** Theory and principles of nursing practice with clients experiencing psychosocial problems of adaptation. *Two lecture hours per week.* PREREQUISITE: NURS 2217, 2218, 2219, 2220, 3000, 3101, 3400. COREQUISITE: *NURS 3129.

**NURS 3129. Psychiatric Mental Health Nursing Practicum. (2).** Use of nursing process for clinical application of theories and principles of psychiatric mental health nursing to acutely ill clients in secondary care settings; effective therapeutic communication skills emphasized. *Six clinical laboratory hours per week in health care setting.* PREREQUISITE: NURS 2217, 2218, 2219, 2220, 3000, 3101, 3400. COREQUISITE: *NURS 3127. (S/U).

**NURS 3217. Nursing Care of the Expanding Family. (2).** Theory and principles of nursing practice with childbearing individuals and families to assist perinatal clients and families with problems of adaptation. *Two lecture hours per week.* PREREQUISITE: NURS 2217, 2218, 2219, 2220, 3000, 3101, 3400. COREQUISITE: *NURS 3219.

**NURS 3219. Nursing Care of Expanding Family Practicum. (2).** Use of nursing process for clinical application of theories and principles of nursing and family theory to childbearing families; health promotion, prevention and adaptation. *Nine clinical laboratory hours per week in health care setting.* PREREQUISITE: NURS 2217, 2218, 2219, 2220, 3000, 3101, 3400. COREQUISITE: *NURS 3217. (S/U).

**NURS 3227. Child Health Nursing. (2).** Theory and principles of nursing practice with children experiencing health problems requiring short-term and/or long-term intervention; expansion of nursing role to include health maintenance and restoration of health. *Two lecture hours per week.* PREREQUISITE: NURS 3117, 3118, 3119. COREQUISITE: *NURS 3229.

**NURS 3229. Child Health Nursing Practicum. (3).** Use of nursing process for clinical application of theories and principles of nursing of children and their families. Focus on health promotion, prevention, and adaptation. *Nine clinical laboratory hours per week in health care setting.* PREREQUISITE: NURS 3117, 3118, 3119. COREQUISITE: *NURS 3227. (S/U).

**NURS 3317. Perioperative Nursing (1).** Theoretical foundation for perioperative practice during the intraoperative phase. PREREQUISITE: NURS 3117, 3118, 3119. COREQUISITE: *NURS 3319.

**NURS 3319. Perioperative Nursing Practicum (2).** Application of perioperative nursing process with clinical practice in both the scrub/circulating nursing roles. *Six clinical laboratory hours per week.* PREREQUISITE: NURS 3117, 3118, 3119. COREQUISITE: *NURS 3317.

**NURS 3400. Clinical Pathophysiology. (3).** Overview of specific interruptions in normal function of selected human physiological systems, including disease processes, their manifestations, and therapeutic principles underlying treatment. *Three lecture hours per week.* PREREQUISITE: BIOL 2010/2011, 2020/2021, CHEM 1010, 1020, MMCS 1230/1231.

**NURS 4110. Nursing Research. (3).** Overview of nursing research; components of research studied; critiques of existing studies; emphasis on interpretation and application of research findings. PREREQUISITE: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229. For RN students: admission to the Loewenberg School of Nursing; EDPR 4541 or PSYC 3110 or SOCI 3311. **[W]**

**NURS 4117. Advanced Adult Health Nursing. (2).** Application of nursing process with adult clients, families, and groups experiencing complex problems of adaptation; role of nurse expanded to include health maintenance, restoration, and rehabilitation of clients experiencing problems of adaptation requiring higher acuity levels of care. *Two lecture hours per week.* PREREQUISITE: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229. COREQUISITE: *NURS 4119.

**NURS 4119. Advanced Adult Health Nursing Practicum. (3).** Clinical experiences include direct care to adult clients, families, and groups in high acuity care settings. *Nine laboratory hours per week.* PREREQUISITE: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229. COREQUISITE: *NURS 4117. (S/U).

**NURS 4120. Contemporary Issues and Trends in Nursing and Health Care. (2).** Factors which influence nursing and health care; promotes integration and synthesis of knowledge from previous nursing and general education courses to explore societal and political components that affect delivery of health care. *Two lecture hours per week.* PREREQUISITE: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229. For RN students: admission to the Loewenberg School of Nursing.

**NURS 4127. Community Health Nursing. (3).** Overview of community based health care delivery system at local, state, and national levels; theories and principles of nursing care of communities and aggregates in public health and home health care settings; expands nursing role to coordinator of care. *Three lecture hours per week.* PREREQUISITE: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229. COREQUISITE: *NURS 4129.

**NURS 4129. Community Health Nursing Practicum. (2-3).** Use of nursing and public health theories and principles to provide nursing care to families and communities. *Nine laboratory hours per week.* PREREQUISITE: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229. COREQUISITE: *NURS 4127 (S/U).

**NURS 4137. Emergency/Trauma Nursing. (3).** Application of nursing process with adult clients, significant others, and group experiencing emergency/trauma situations; resuscitation, health maintenance, restoration, and rehabilitation of clients experiencing problems of adaptation requiring acute emergency/trauma levels of care in Emergency Department setting.

**NURS 4139. Emergency/Trauma Nursing Practicum. (2).** Provides students with opportunity to directly care for adult clients and their significant other(s) in emergency settings.

**NURS 4227. Nursing Leadership and Management. (3).** Theories of leadership, management, and change basic to functioning within economic, social and political realities of health care settings/systems; organizational assessment, decision making, collaboration, coordination, and evaluation emphasized. PREREQUISITE: NURS 4117, 4119. COREQUISITE: *NURS 4229.

**NURS 4229. Nursing Leadership and Management Practicum. (4).** Precepted experience using nursing leadership management theories and principles to coordinate nursing care of groups of patients. *Fifteen laboratory hours per week in hospital setting.* PREREQUISITE: NURS 4117, 4119. COREQUISITE: *NURS 4227. (S/U). **[I]**

**NURS 4327. Nursing Leadership and Management for RNs. (3).** Theories of leadership, management, and change basic to functioning within existing systems; applications of conceptual models of nursing to contemporary practice. PREREQUISITE: restricted to senior RN students. COREQUISITE: NURS 4329.

**NURS 4329. Nursing Leadership and Management Practicum for RNs. (3).** Percepted experience in selected roles using appropriate theories and models to guide practice. *Nine laboratory hours per week in clinical setting.* PREREQUISITE: restricted to RN students. COREQUISITE: NURS 4327. (S/U). **[I]**

**NURS 4331. Cultural Nursing. (3).** Opportunity to observe nursing and health care in selected cultural environment. Tours and lectures provided to highlight salient features of nursing, health care and other points of interest. Travel to selected region required. PREREQUISITE: admission to Loewenberg School of Nursing.

**NURS 4332. Cultural Diversity and Nursing. (3).** Theory and principles of nursing practice related to cultural diversity and development of cultural competence in providing quality care to diverse patient populations. PREREQUISITE: NURS 3117, 3118, 3119, 3127, 3128, 3129.

**NURS 4333. Gerontological Nursing. (3).** Theory and principles of nursing practice with aging and elderly clients and their significant others. PREREQUISITE: NURS 3117, 3118, 3119, 3127, 3128, 3129.

**NURS 4335. Ethical Dialogs. (3).** Bioethical principles used to analyze ethical health care problems of the individuals, providers of care and coordinators of care; allocation of scarce health resources examined in contexts of delivery of care, institutional management and policy development. PREREQUISITE: all provider courses, or permission of faculty.

**NURS 4300-09. Special Topics in Nursing. (3).** Topics are varied and in online class listings.

**NURS 4800. Independent Study. (1-3).** Directed study and/or research in selected areas of nursing. May be repeated for maximum of 7 hours credit. PREREQUISITE: senior standing and permission of faculty. (A-F, IP)

## (PADM) OPEN LEARNING FIRE SERVICES PROGRAM

### School of Urban Affairs and Public Policy

### Division of Public and Nonprofit Administration

DOROTHY NORRIS-TIRRELL, Ph.D., *Director*
*Room 136, McCord Hall*

*http://www.people.memphis.edu/~gapubaddm/*

**Admission to PADM 3610, 3611, 3612, 3613, 3614, and 3615 is restricted to students seeking the Bachelor of Professional Studies degree in Fire Administration or Fire Prevention Technology through the University College.**

**PADM 3610. Personnel Management for the Fire Service. (3). (POLS 3610).** Personnel practices and management procedures; manpower planning, labor relations recruitment, selection, testing, performance appraisals, classification, motivation, politics, and management.

**PADM 3611. Disaster and Fire Defense Planning (3). (POLS 3611).** Concepts and principles of community risk assessment, regional and cooperative procedures and plans; relationship of structural, climatic and topographical variables to group fires, conflagrations, and natural disasters; pre- and post-occurrence factors; communications, planning, organizing, coordination, command and logistics.

**PADM 3612. Fire Prevention Organization and Management. (3). (POLS 3612).** Examines and evaluates techniques, procedures, programs and agencies involved with fire prevention; public and private fire prevention functions, licenses, permits, zoning, legal aspects; inspection, investigations, planning; arson, and incendiary analysis.

**PADM 3613. Advanced Fire Administration. (3). (POLS 3613).** Overview of organization and management in modern fire service; management of equipment and personnel; fire department functions, planning, resource development, labor relations.

**PADM 3614. Political and Legal Foundations of Fire Protection. (3). (POLS 3614).** Legal basis for police power of government related to public safety; legal limitations and responsibility; liability of fire prevention organizations and personnel; review of judicial decisions. **[W]**

**PADM 3615. The Community and The Fire Threat. (3). (POLS 3615).** Sociological, economic and political characteristics of communities and their influence on fire problem; how to study community profiles and structures with consideration of economic, geographic, and sociological variables of fire threat; examination of functional basis of community, diverse social roles of community agencies, study of fire services as complex organization in community.

## (PADM) PUBLIC and NONPROFIT ADMINISTRATION

### School of Urban Affairs and Public Policy

### Division of Public and Nonprofit Administration

DOROTHY NORRIS-TIRRELL, Ph.D., *Director*
*Room 136, McCord Hall*

*http://www.people.memphis.edu/~gapubaddm/*

**PADM 3601. Public Administration. (3). (Same as POLS 3601).** Concepts and practices of organization and management in executive departments, national, state, and local; analysis of bureaucracy, administrative theory, budgeting; personal and administrative leadership. **[W]**

**PADM 4101-6101. Political Statistics. (3). (Same as POLS 4101).** Introduction to analysis of quantitative data, and statistical hypothesis testing in the fields of political science and public and health administration. **[C]**

**PADM 4207-6207. Health Politics and Policy. (3).** Introduction to the political, economic, and social forces affecting the health care system in the United States; emphasis on the development and comparison of health policies within the context of the stages of American policy making.

**PADM 4208-6208. Mental Health Policy and Law. (3).** Mental health systems, including voluntary and involuntary hospitalization, incompetence and guardianship, and mental health issues in criminal process; legal and policy concerns for mental health professionals, including regulation, malpractice, informed permission, and record confidentiality.

**PADM 4209-6209. Aging Policy and Law. (3).** Social control and social justice considerations in such policy areas of protective services, Social Security, Medicare and Medicaid, long-term care, age discrimination, and death with dignity.

**PADM 4221-6221. Issues in Urban Administration. (3).** Politics, administration, and public policy in urban context; administrative aspects of selected governmental policy-making processes; interrelationships of governments at various levels; urban challenges facing modern public administrators.

**POLS 4225-6225. Applications in Urban Administration. (3).** Tools and strategies of public and nonprofit administration to accomplish collective purposes, develop communities, and enhance civic capacity toward improved quality of life in urban settings.

**PADM 4226. Introduction to Nonprofit Organizations. (3). (Same as POLS 4226).** Critical understanding of historical development and impact of public sector, dynamic environment of nonprofit organization and current issues of importance to nonprofit decision makers.

**PADM 4231. Administrative Internship. (3-12). (Same as POLS 4231).** Supervised internship working with administrative branches of national, state, or local governments. Seminar sessions to discuss and analyze problems with which interns are working. May be repeated for a maximum of 12 hours credit. PREREQUISITE: permission of division. (A-F, IP)

**PADM 4710-19-6710-19. Special Topics in Public Administration. (1-3).** In-depth study of selected topics and issues related to public and nonprofit administration. Topics are varied and in online class listings. May be repeated for a maximum of 6 hours credit.

## (PETE) PHYSICAL EDUCATION TEACHER EDUCATION

### Department of Human Movement Sciences and Education

MICHAEL H. HAMRICK , Ed.D., *Chair*
*Room 106, Elma Neal Roane Fieldhouse*
*http://www.hmse.memphis.edu/*

**PETE 2001. Skills in Individual Fitness and Applications to Teaching. (2).** Knowledge, skills, and techniques of teaching fitness; individual skill development as well as competency in instructional techniques of teaching fitness in school settings.

**PETE 2002. Educational Games and Team Sport Skills. (2). (EXSS 2002).** Knowledge, skills, and techniques of teaching educational games and team sports; individual skill development; competency in instructional techniques of teaching educational games in school settings.

**PETE 2003. Skill Competence in Individual Sports. (2). (EXSS 2003).** Knowledge, skills, and techniques of teaching individual sport skills; individual skill development; competency in instructional techniques of teaching individual sport skills in school settings. Students select from a variety of different individual sports including but not limited to badminton, tennis, and golf.

**PETE 2006. Educational Gymnastic and Movement Concepts. (2).** Knowledge, skills, and techniques of teaching educational gymnastics; individual skill development; competency in instructional techniques of teaching educational gymnastics in school settings.

**PETE 2009. Educational Dance and Movement Concepts. (2). (EXSS 2009).** Knowledge, skills, and techniques of teaching educational dance; individual skill development; competency in instructional techniques of teaching educational dance in school settings.

**PETE 3308. Exceptional Learners in Physical Education. (3). (EXSS 3308).** Nature and etiology of disabilities prevalent in children, knowledge and technical skills pertinent to the design of adapted physical activity programs and the teaching of physical activities for specific disabilities.

**PETE 3800. Instructional Strategies in Physical Education. (3).** Development and application of developmentally appropriate instructional strategies in school based physical activity settings. In this course students initiate their Professional Development Portfolios (PDP). Students must be accepted into the Teacher Education Program to enroll in this course.

**PETE 3903. Historical and Philosophical Aspects of Physical Activity. (3). (EXSS 3903).** Development of the discipline of physical education through historical, philosophical, sociological and scientific bases. PREREQUISITE: upper division standing and satisfactory completion of the English composition requirements. [W]

**PETE 4200. Curriculum and Integrated Learning in Elementary School Physical Education. (4). (PHED 3604 and 3605).** Development and implementation of developmentally appropriate curricula in early childhood and elementary school physical activity settings. Part of the PETE Instructional Block taken in the Fall of Senior year. Block courses may be taught in local Professional Development Schools. Students must be accepted into the Teacher Education Program to enroll in this course. COREQUISITE: PETE 3800, 4300, and 4400.

**PETE 4300. Curriculum and Integrated Learning in Middle and Secondary School Physical Education. (4). (EXSS 4808 and 4809).** Teaching strategies, management techniques, curricula planning, evaluation and research for effective physical education teaching in grades 7-12. Part of PETE Instructional Block taken in the Fall of Senior year. Block course may be taught in local Professional Development Schools. Students must be accepted into the Teacher Education Program to enroll in this course. COREQUISTE: PETE 3800, 4200, and 4400.

**PETE 4400. Learner Assessment in School Based Physical Education. (4). (PHED 4204).** Assessment techniques, tools and resources and their application to assessment in school based physical activity programs. Part of PETE Instructional Block taken in the Fall of Senior year. Block course may be taught in local Professional Development Schools. Students must be accepted into the Teacher Education Program to enroll in this course. COREQUISTE: PETE 3800, 4200, and 4300. [C]

**PETE 4800. Professional Seminar: Preparing Educational Leaders in Physical Education. (3).** Senior seminar taken concurrently with student teaching. Students to analyze and seek solutions to problems encountered in current practices and issues in education and specific to physical education; integrate and synthesize knowledge and experiences in development of roles as professional educational leaders. Student's Professional Development Portfolio (PDP) is assessed as part of this course. Students must be accepted into the Teacher Education Program to enroll in this course. COREQUISITE: Student Teaching. [I]

**PETE 4909. Student Teaching in PETE. (9).** Full-time planned and supervised experience in a setting appropriate to student's area of specialization; synthesize knowledge and skills; demonstrate professional competencies in educational settings. PREREQUISITE: approval from Teacher Education Director. COREQUISITE: PETE 4800.

## (PHED) PHYSICAL EDUCATION

### Department of Human Movement Sciences and Education

MICHAEL H. HAMRICK , Ed. D., *Chair*
*Room 106, Elma Neal Roane Fieldhouse*
*http://www.hmse.memphis.edu/*

**PHED 1003. Aerobics. (2).** May be repeated once for credit. [G]

**PHED 1004. Jogging. (2).** May be repeated once for credit. [G]

**PHED 1005. Conditioning for Varsity Sports. (2).** Open only to varsity athletes, cheerleaders, and members of the pom pon squad. May be repeated once for credit. [G]

**PHED 1006. Water Aerobics. (2).** May be repeated once for credit. [G]

**PHED 1007. Yoga, Stretching and Relaxation. (2).** May be repeated once for credit. [G]

**PHED 1008. Walking for Health and Fitness (2).** May be repeated once for credit. [G]

**PHED 1009. Fitness through Cross Training. (2).** May be repeated once for credit. [G]

**PHED 1010-19. Selected Physical Education Activities. (1-3).** Current activities in physical education. See online class schedule for specific activity. May be repeated with a change in topic. [G]

**PHED 1107. Yoga II: Stretching and Relaxation- Therapeutic Approaches. (2).** [G]

**PHED 1301. Weight Training with Machines. (2).** [G]

**PHED 1302. Free Weights and Machines. (2).** [G]

**PHED 1331. Camping. (2).** [G]

**PHED 1333. Backpacking.(2).** [G]

**PHED 1340. Introduction to Fly Fishing. (2).** [G]

**PHED 1361. Horseback Riding. (2).** [G]

**PHED 1412. Judo. (2).** [G]

**PHED 1413. Self Defense Techniques. (2).** [G]

**PHED 1441. Karate. (2). [G]**

**PHED 1442. Advanced Karate. (2). [G]**

**PHED 1443. Aikido. (2). [G]**

**PHED 1444. Kickboxing (2). [G]**

**PHED 1445. Tae Kwon Do. (2). [G]**

**PHED 1501. BeginningTennis. (2). [G]**

**PHED 1502. Intermediate Tennis. (2). [G]**

**PHED 1521. Racquetball. (2). [G]**

**PHED 1522. Intermediate Racquetball. (2). [G]**

**PHED 1541. Badminton. (2). [G]**

**PHED 1561. Bowling. (2). [G]**

**PHED 1562. Intermediate Bowling. (2). [G]**

**PHED 1571. Golf. (2). [G]**

**PHED 1572. Intermediate Golf. (2). (G]**

**PHED 1711. Beginning Swimming I. (2). [G]**

**PHED 1712. Beginning Swimming II. (2). [G]**

**PHED 1713. Intermediate Swimming. (2). [G]**

**PHED *1722. Swimming - Lifeguarding. (2). [G]**

**PHED 1742. Conditioning Through Swimming. (2). [G]**

**PHED *1771. Scuba. (2). [G]**

**PHED *1772. Advanced Scuba. (2). [G]**

**PHED 1782. Kayaking. (2). [G]**

**PHED 1783. Canoeing. (2). [G]**

**PHED 1811. Rhythms for Elementary School. (2). [G]**

**PHED 1921. Basketball. (2). [G]**

**PHED 1923. Volleyball. (2). [G]**

**PHED 1924. Intermediate Volleyball. (2). [G]**

**PHED 1931. Soccer and Field Sports. (2). [G]**

**PHED 2703. Water Safety Instructor. (3).** Analysis, practice, and teaching of swimming and lifesaving skills and general water safety practice. Variable hours of supervised laboratory/field experience will be required. PREREQUISITE: experienced swimmer.

**PHED 3406. Lifeguarding and Pool Management. (3).** Theory and application of lifeguarding skills, pool management, records/reports and pool maintenance and sanitation. PREREQUISITE: PHED 1722 or Red Cross Lifesaving certificate; HMSE 2102 or Red Cross or Heart Association CPR/Basic Life Support.

*The prerequisite for these courses is Physical Education skills 1713.

## (PHIL) PHILOSOPHY

NANCY D. SIMCO, Ph.D., *Chair*
*Room 327, Clement Hall*

*http://cas.memphis.edu/philosophy/*

**PHIL 1101. Classical Issues In Philosophy. (3).** Introduction to philosophical thought focused on emergence of philosophical inquiry in Classical period; examines influence of classical philosophical issues on science, religion and society, and their relevance to modern culture. [G] ♦

**PHIL 1102. Values and the Modern World. (3).** Discussion of nature of value, development of traditional values in East and West, criticisms of traditional values and comparative assessment of most widely accepted value philosophies of modern world. [G] ♦

**PHIL 1611. Elementary Logic. (3).** Formal and informal reasoning emphasizing logic as practical method for problem solving. PREREQUISITE: two units of high school algebra or one unit algebra and one unit geometry.

**PHIL 3001. Foundations of Western Philosophy: Classical Period. (3).** History of philosophy from 7th century B.C. through early Middle Ages structured around major themes that shaped classical period, attention to cultural and historical settings in which they arose and to which they contributed; readings from philosophical and nonphilosophical sources. PREREQUISITE: PHIL 1101 or 1102, or permission of instructor.

**PHIL 3002. Foundations of Western Philosophy: Modern Period. (3).** History of philosophy from late Middle Ages through 19th century structured around major themes that shaped the modern period; attention to cultural and historical setting in which they arose and to which they contributed; readings from philosophical and nonphilosophical sources. NOTE: while this is a continuation of PHIL 3001, it may be taken separately. PREREQUISITE: PHIL 1101 or 1102, or permission of instructor.

**PHIL 3411. Contemporary Moral Problems. (3).** Such important contemporary moral issues as pornography and obscenity, capital punishment, abortion, human rights, "reverse discrimination," and civil disobedience; underlying philosophical ideas for each issue considered and discussed.

**PHIL 3451. Existentialism. (3).** Historical and comparative study of different existentialist writers and their relation to literature, religion, and psychology; readings from such writers as Kierkegaard, Nietzsche, Jaspers, Heidegger, Sartre, and Camus.

**PHIL 3452. Feminist Theory. (3).** Selected ideas from the history on women from the Greeks to the present; developing methods and ideologies within contemporary theoretical approaches to feminist studies; diversity, equality and difference discussed by drawing on different epistemologies, such as existentialism and post-structuralism.

**PHIL 3460. Nature, Mind, Knowledge. (3).** The nature of mind, free will vs. determinism, personal identity and immortality, and the nature and possibility of knowledge.

**PHIL 3511. Ethics. (3).** Critical analysis of classical ethical theories and their application to problems of individual and society. PREREQUISITE: PHIL 1101 or 1102, or permission of instructor. [W]

**PHIL 3512. Science, Technology and Human Values. (3).** Ethical problems growing out of development of modern science and technology; relation of science to society, dehumanization of individual, impact of technology on environment, and modern warfare. Specific content of course varies each semester.

**PHIL 3514. Biomedical Ethics. (3).** Discussion of ethical problems raised by contemporary medical practices and biological innovations from standpoint of contemporary ethical theories including abortion, euthanasia, behavior modification, human experimentation and genetic engineering.

**PHIL 3621. Intermediate Logic. (3).** Symbolic logic, including propositional calculus, lower functional calculus, and related topics. PREREQUISITE: PHIL 1611, or permission of instructor. [C]

**PHIL 3701. The Human and the Divine. (3).** Examination of one or more major religious movements with regard to their origins, doctrines, and philosophical significance; contrasting conceptions of deity, worship, and role of religion in how we think about ourselves and our roles in society.

**PHIL 3721. Chinese Philosophy. (3).** Introduction to Chinese philosophy; readings from primary source of Confucianism, Taoism, and Buddhism, supplemented by commentary from contemporary scholarship.

**PHIL 3741. African American Philosophy. (3).** Philosophical investigation of social and political themes which have developed historically in African American culture such as theories of social elevation, civil disobedience, race and racism, and black feminism.

**PHIL 3771. Philosophy In Literature. (3).** Expression of philosophical ideas in literature; readings from philosophers, playwrights, novelists and poets.

**PHIL 3880. Problems in Philosophy. (3).** Intensive study of selected philosophical problems. May be repeated for a maximum of 6 hours credit. PREREQUISITE: PHIL 1101 or 1102, or permission of instructor.

**PHIL 4211-6211. Studies In Ancient Philosophy. (3).** Readings from primary sources, supplemented by commentary from antiquity and modern scholarship, including Pre-Socratics, Plato, Aristotle, and Hellenistic period. May be repeated for a maximum of 9 hours credit with permission of the Department Undergraduate Advisor. PREREQUISITE: PHIL 3001, or permission of instructor.

**PHIL 4311-6311. Studies in Modern Philosophy. (3).** Readings from major philosophers of 17th to early 19th centuries, supplemented by commentaries from modern and contemporary sources. May be repeated for a maximum of 9 hours credit with permission of the Department Undergraduate Advisor. PREREQUISITE: PHIL 3002, or permission of instructor.

**PHIL 4421-6421. Philosophy of Mind. (3).** Major issues and positions in recent philosophy of mind; behaviorism; reductive, non-reductive, and eliminative versions of materialism; functionalism; mental causation; phenomenal consciousness; psychoanalysis and the unconscious; computational and connectionist models of mind. PREREQUISITE: PHIL 1101, 1102, or 1611, or permission of instructor.

**PHIL 4422-6422. Recent Anglo American Philosophy. (3).** Major developments in philosophy in England and United States from 1900 to present, reading from such philosophers as Russell, Moore, Ayer, Wittgenstein, James, Dewey, Lewis, Quine and other contemporary authors. PREREQUISITE: PHIL 3002 or 4311, or permission of instructor.

**PHIL 4441-6441. Recent Continental Philosophy. (3).** Major figures in 20th Century European thought; phenomenology, existentialism, structuralism, critical theory, and hermeneutics. May be repeated for a maximum of 9 hours credit with permission of the Department Undergraduate Advisor.

**PHIL 4551-6551. Social and Political Philosophy. (3). (3351).** Major philosophical theories of man and the state; emphasis on concepts of society, culture, institutions, government, law, power, authority, rights, and obligation. Selected readings. PREREQUISITE: PHIL 1101 or 1102, or permission of instructor.

**PHIL 4632-6632. Advanced Logic. (3).** Nature of axiomatic systems, techniques of formalization, and logical foundations of mathematics. PREREQUISITE: PHIL 3621, or permission of instructor.

**PHIL 4661-6661. Philosophy of Science. (3). (3662).** Basic features and presuppositions of science; nature of scientific method, theories, explanation, and verification with emphasis on natural sciences. PREREQUISITE: PHIL 1611, or permission of instructor.

**PHIL 4671-6671. Aesthetics. (3). (3671).** Introduction to philosophical theories and assumptions concerning nature and role of art and possibility of aesthetic evaluation.

**PHIL 4801-20-6801-20. Special Topics In Philosophy. (3).** Epistemology, metaphysics, philosophy of language, philosophy of mind, logical theory, and axiology. Topics are varied and in online class listings. May be repeated for maximum of 15 hours credit without changing an earlier grade if different areas are treated. PREREQUISITE: two courses in philosophy, or permission of instructor.

**PHIL 4891. Senior Honors Thesis. (3).** Directed reading and research culminating in a Senior Thesis. Thesis topic to be selected by student with approval of thesis director before semester student intends to take course. Open only to senior honors students in philosophy. May be repeated in successive semesters for a maximum of 6 hours credit. (A-F, IP)

**PHIL 4994. Reading and Research. (1-3).** Individual directed study in area of special interest. May be repeated in successive semesters for maximum of 6 hours credit. (A-F, IP)

## (PHYS) PHYSICS

SHAH JAHAN, Ph.D., *Chair*
*Room 216, Manning Hall*

*http://www.people.memphis.edu/~physics*

*Additional fees are charged for some Physics lecture and laboratory courses.* See the online class listings or the Expenses section of the Bulletin.

**PHYS 1001. Introductory Laboratory. (1). (1101 lab).** Laboratory experiments and techniques to accompany PHYS 1010. *Two laboratory hours per week.* PREREQUISITE or COREQUISITE: PHYS 1010. **[G]** ♦

**PHYS 1002. Astronomy Laboratory. (1). (1102 lab).** Laboratory experiments and techniques to accompany PHYS 1020. *Two laboratory hours per week.* PREREQUISITE or COREQUISITE: PHYS 1020. **[G]** ♦

**PHYS 1010. Introductory Physics. (3). (1101).** Phenomenological introduction to physics for non-technical students, providing an understanding of natural laws of motion, structure of matter, heat, sound, electromagnetics, light, atomic and nuclear physics. NOTES: credit will not apply toward major or minor in the sciences, nor will it satisfy any part of science requirements in pre-professional curricula. PHYS 1001 must be taken concurrently to satisfy the General Education Program requirement. *Three lecture hours per week.* **[G]** ♦

**PHYS 1020. Survey of Astronomy. (3). (1102).** Motions of earth and moon; apparent motion of stars and planets; orbits and properties of bodies in the solar system; stellar distances, properties, and evolution; our galaxy and others. NOTE: PHYS 1002 must be taken concurrently to satisfy the General Education Program requirement. *Three lecture hours per week.* **[G]**♦

**PHYS 2010. General Physics I / Trigonometry. (3). (2110).** Mechanics, heat, and sound. This course is recommended for students in pre-medical programs. NOTE: For first-time enrollees, PHYS 2011 must be taken concurrently. *Three lecture hours per week.* PREREQUISITE: MATH 1720 or equivalent.

**PHYS 2011. General Physics I Laboratory. (1). (2001).** Laboratory experiments and techniques to accompany PHYS 2010. *Two laboratory hours per week.* PREREQUISITE or COREQUISITE: PHYS 2010.

**PHYS 2020. General Physics II / Trigonometry. (3). (2120).** Continuation of PHYS 2010. Magnetism, electricity, light, and modern physics. Recommended for students in pre-medical programs. NOTE: for first-time enrollees, PHYS 2021 must be taken concurrently. *Three lecture hours per week.* PREREQUISITE: PHYS 2010.

**PHYS 2021. General Physics II Laboratory. (1). (2002).** Laboratory experiments and techniques to accompany 2020. *Two laboratory hours per week.* PREREQUISITE or COREQUISITE: PHYS 2020.

**PHYS 2110. Physics I for Science and Engineering / Calculus. (3). (2510).** Principles of mechanics using methods of calculus; Newton's laws, kinetic and potential energy, linear and angular momentum. NOTE: for first-time enrollees, PHYS 2111 must be taken concurrently. *Three lecture hours per week.* COREQUISITE: MATH 1910. **[G]** ♦

**PHYS 2115. Classical Physics. (3). (2515).** Principles of fluid dynamics, sound, heat, optics, and special relativity. Recommended for all science and engineering majors. Required for physics majors. *Three lecture hours per week.* PREREQUISITE: PHYS 2010 or PHYS 2110.

**PHYS 2111. Physics I for Science and Engineering Laboratory. (1). (2003).** Laboratory experiments and techniques to accompany PHYS 2110. *Two laboratory hours per week.* PREREQUISITE or COREQUISITE: PHYS 2110. **[G]** ♦

**PHYS 2120. Physics II for Science and Engineering / Calculus. (3). (2520).** Continuation of PHYS 2110. Principles of electromagnetism using methods of calculus; Guss's Law, current, resistance, capacitance, Faraday's law, and inductance. NOTE: for first-time enrollees, PHYS 2121 must be taken concurrently. *Three lecture hours per week.* PREREQUISITE: PHYS 2110 and MATH 1920. **[G]** ♦

**PHYS 2121. Physics II for Science and Engineering Laboratory. (1). (2004).** Laboratory experiments and techniques to accompany PHYS 2120. *Two laboratory hours per week.* PREREQUISITE or COREQUISITE: PHYS 2120. **[G]** ♦

**PHYS 3010. Introduction to Modern Physics. (3).** Principles and applications of quantum mechanics; atomic structure; nuclear and particle physics, solid state, radiation and molecular physics. *Three lecture hours per week.* PREREQUISITE: PHYS 2120 and MATH 2110. **[C]**

**PHYS 3011. Theoretical Physics I. (3).** Special mathematical techniques in solution of physical problems; emphasis on vector calculus, boundary value problems, eigen-value problems, and Fourier series. *Three lecture hours per week.* PREREQUISITE: MATH 2110. **[C]**

**PHYS 3012. Theoretical Physics II. (3).** Continuation of PHYS 3011 covering complex variables, partial differential equations and special functions of physics. *Three lecture hours per week.* PREREQUISITE: PHYS 3011.

**PHYS 3040. Biophysics. (3).** Biomedical applications of physics, understanding electric potentials in biological systems, electrodynamics of nerves, interactions of photons and charged particles in biological materials; use of X-rays in imaging and treatment. *Three lecture hours per week.* PREREQUISITE: PHYS 2020 or PHYS 2120.

**PHYS 3051. Astrophysics I. (3).** Principles of physics applied to the solar system, stars, light, and telescopes. Recommended for science and engineering majors interested in astronomy. *Three lecture hours per week.* PREREQUISITE: PHYS 2020 or PHYS 2120.

**PHYS 3111. Mechanics. (3).** Advanced classical mechanics; includes statistics, dynamics of particles, rigid bodies, fluid flow, work, energy, momentum, force fields, and harmonic motion. *Three lecture hours per week.* PREREQUISITE: PHYS 2120. COREQUISITE: PHYS 3011 and MATH 3120.

**PHYS 3112. Mechanics I. (3).** Continuation of PHYS 3111. *Three lecture hours per week.* PREREQUISITE: PHYS 3111.

**PHYS 3211. Electricity and Magnetism. (3).** Electromagnetic fields and waves, dielectrics, induced electromotive force, magnetic energy, magnetic materials, Maxwell's equations, and reflection and refraction. *Three lecture hours per week.* PREREQUISITE: PHYS 2120, PHYS 3011, and MATH 2110.

**PHYS 3212. Electricity and Magnetism II. (3).** Continuation of PHYS 3211. *Three lecture hours per week.* PREREQUISITE: PHYS 3211.

**PHYS 3410. Environmental Physics. (3).** Application of gas laws, transport laws, and heat transfer in environmental processes; environmental radiation (solar and terrestrial), energy system of atmosphere and hydrosphere, and energy resources and their impact upon environment. *Three lecture hours per week.* PREREQUISITE: PHYS 2020 or PHYS 2120.

**PHYS 3510. Electronics. (4).** Theory and application of electronic devices; emphasis on scientific instrumentation. Laboratory oriented course including basic semiconductors, integrated circuits, and microprocessors. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: PHYS 2120.

**PHYS 3610. Experimental Techniques. (1).** Introduction to independent experimentation and data analysis. Includes experiments in mechanics, electricity and magnetism, optics and modern physics. *Three laboratory hours per week.* PREREQUISITE: PHYS 2120.

**PHYS 3611. Experimental Techniques II. (1).** Continuation of PHYS 3610. PREREQUISITE: PHYS 3610. *Three laboratory hours per week.*

**PHYS 4000-09-6000-09. Special Topics in Physics. (3).** Topics are varied and in online class listings. *Three lecture hours or equivalent laboratory hours per week.* PREREQUISITE: permission of instructor.

**PHYS 4021-6021. Applied Radiation Physics. (3).** Applied radiation and radioactivity; types of radiation, radiation measurement interaction with matter, and biological effects; radiation safety aspects emphasized. *Three lecture hours per week.* PREREQUISITE: PHYS 2120 or PHYS 2020 and MATH 1910.

**PHYS 4040-6040. Medical Physics. (3).** Physics of sensory, respiratory, and circulatory systems; physical basis of radiology and nuclear medicine. *Three lecture hours per week.* PREREQUISITE: PHYS 3040.

**PHYS 4051-6051. Astrophysics II. (3).** Principles of physics applied to star birth and death, black holes and neutron stars, galaxies, and quasars; beginning and evolution of the universe. *Three lecture hours per week.* PREREQUISITE: PHYS 3051.

**PHYS 4110-6110. Nuclear Physics. (3).** Properties of atomic nuclei, radioactive transitions, alpha, beta, and gamma decay; binding energy, nuclear forces and nuclear models. *Three lecture hours per week.* PREREQUISITE: PHYS 3010.

**PHYS 4211-6211. Optics. (3).** Brief review of geometrical optics; concentration on wave optics; polarization phenomena, interference, diffraction, coherence, holography, and scattering. *Three lecture hours per week.* PREREQUISITE: PHYS 3011 and PHYS 3211.

**PHYS 4410-6410. Introduction to Quantum Theory. (3).** Experimental basis of quantum theory; development of Schrodinger equation and its solution of simple systems; selected applications in atomic and molecular structure. *Three lecture hours per week.* PREREQUISITE: PHYS 3010, PHYS 3111, and PHYS 3211.

**PHYS 4510-6510. Thermodynamics. (3).** Mathematical treatment of thermodynamics, including such topics as work, energy, enthalpy, entropy, reversible and irreversible processes, equilibria, specific heats, and phase transitions. *Three lecture hours per week.* PREREQUISITE: PHYS 2120 and PHYS 3011. **[W]**

**PHYS 4610-6610. Solid State Physics. (3).** Such topics as lattice vibrations, specific heats, electrical and thermal conductors in solids, magnetism. *Three lecture hours per week.* PREREQUISITE: PHYS 4410. **[I]**

**PHYS 4910. Seminar. (1).** Special projects, reports and investigation of current literature and research. May be repeated for maximum of 2 hours credit. PREREQUISITE: permission of instructor. (S/U).

**PHYS 4990. Research in Physics. (1-4).** Collaboration with faculty member on problem of mutual interest. Two to eight laboratory or equivalent hours per week. May be repeated for maximum of 4 hours credit. Students expected to complete prospectus in collaboration with faculty member before registering. PREREQUISITE: PHYS 3010 and permission of instructor. (A-F, IP)

## (POLS) POLITICAL SCIENCE

KENNETH HOLLAND, Ph.D., *Interim Chair*
*Room 437, Clement Hall*
*http://polisci.memphis.edu*

**POLS 1100. American Government. (3). (2211).** Development, structure, and processes of American system of government, including framing principles of U.S. Constitution and Bill of Rights; structure and roles of President, Congress, and Supreme Court, and citizen participation in governing. **[G]**

**POLS 1101. Introduction to Ancient Political Thought. (3).** Inquiry into fundamental questions of ancient political thought, such as: Who should rule? What is justice? What is a good political order? What are the duties of citizens? What is the foundation of morality? **[G]** ♦

**POLS 1102. Introduction to Modern Political Thought. (3).** Inquiry into fundamental questions of modern political thought, such as origin of political society, proper rights of citizens, legitimate purposes of government, meaning of justice and good society. **[G]** ♦

**POLS 1301. Governments of the World. (3). (2301).** Comparison of institutions, issues, processes and policies in a variety of political systems ranging from European to Asian or African countries. **[G]**

**POLS 1501. International Relations. (3). (2501).** Consideration of all major forms of political interaction (conflict competition, and cooperation) between and among global actors in world arena. **[G]**

**POLS 3102. Religion and Politics. (3).** Survey of role of religion and religious belief in politics; emphasizes role of religious institutions in international arena and national politics and effects of religion on behavior and political beliefs. PREREQUISITE: POLS 1100 or POLS 1101 or POLS 1102.

**POLS 3211. State and Local Governments. (3).** Role of state governments in Federal System, political institutions, elections; organization, functions, and problems of state government; emphasis on Tennessee government. PREREQUISITE: POLS 1100, or permission of instructor.

**POLS 3213. Introduction to the Study of Public Policy. (3).** Public policy formulation process and some of the major substantive areas of policy concern in America; emphasis on framework for identifying and analyzing substance of public problems, policy making and policy administration. PREREQUISITE: POLS 1100, or permission of instructor.

**POLS 3215. Interest Groups in American Politics. (3). (4216).** Role and impact of interest groups within American political system, including group theory, tactics, and group relationships with various governmental institutions. PREREQUISITE: POLS 1100, or permission of instructor.

**POLS 3216. Political Parties end Elections. (3).** Political parties and elections in the American political system; emphasis on party organization and activities, campaign strategies and techniques, voting behavior, and two-party system. PREREQUISITE: POLS 1100, or permission of instructor.

**POLS 3217. The Political Media. (3).** Interactions between the political world and the commercial media, emphasizing the variety of methods used by political elites to influence political perceptions. PREREQUISITE: POLS 1100, or permission of instructor.

**POLS 3218. The Chief Executive. (3). (4219).** Contemporary American presidency; Constitutional roots for growth of presidential power; roles of persuasion, reputation, and prestige in shaping foreign and domestic policy; presidential elections; conflicts between executive, legislative, and judicial branches. PREREQUISITE: POLS 1100, or permission of instructor.

**POLS 3219. The Judicial Process. (3). (4220).** Judicial selection, civil and criminal trial procedure, organization of state and federal courts, U.S. Supreme Court decision making process; issues surrounding judicial review. PREREQUISITE: POLS 1100, or permission of instructor.

**POLS 3220. The Legislative Process. (3). (4217).** Origins, organization, functions, and activities of the U.S. Congress. PREREQUISITE: POLS 1100 or permission of instructor.

**POLS 3302. Western European Government and Politics. (3).** Comparative study of selected political systems of Western European States. PREREQUISITE: POLS 1301.

**POLS 3304. African Politics. (3).** Comparative study of politics in Africa; emphasis on current problems, with attention to historical, political, and socioeconomic dimensions. PREREQUISITE: POLS 1301.

**POLS 3306. Latin American Government and Politics. (3).** Forms of organization, functions and operations of government in Latin America; emphasis on development of political institutions and present day trends. PREREQUISITE: POLS 1301.

**POLS 3309. Government and Politics of Middle East. (3).** Analysis of organization and functions of governments in area dominated by tenets of Islam; examination of origin and development of Arab-Israeli conflict. PREREQUISITE: POLS 1301.

**POLS 3401. Legal/Political Thought: Classical. (3).** Question of justice and its relation to law and politics; emphasizes confrontation between classical and modern views. PREREQUISITE: PHIL 1101 or PHIL 1102 or POLS 1101 or POLS 1102 or permission of instructor.

**POLS 3402. Legal/Political Thought: Modern. (3).** Question of justice and its relation to law and politics; emphasizes confrontation between early and recent modernity. PREREQUISITE: PHIL 1101 or PHIL 1102 or POLS 1101 or POLS 1102 or permission of instructor.

**POLS 3405. Introduction to Law and Jurisprudence. (3).** Sources, functions, and processes of law. PREREQUISITE: PHIL 1101 or PHIL 1102 or POLS 1101 or POLS 1102, or permission of instructor.

**POLS 3505. International Organizations. (3).** Theories and concepts of organization of international policy focused on the institutions, both formal and informal, through which much international interaction occurs. PREREQUISITE: POLS 1501, or permission of instructor.

**POLS 3506. American Foreign Policy. (3).** Domestic sources, implementation, and content of U.S. foreign policy. PREREQUISITE: POLS 1100 or POLS 1501.

**POLS 3509. Contemporary Problems in International Relations. (3). (4501).** Studies or problems in area of world politics. May be repeated for maximum of 6 hours credit with change of content. PREREQUISITE: POLS 1501 or permission of instructor. **[W]**

**POLS 3601. Public Administration. (3). (Same as PADM 3601).** Concepts and practices of organization and management in executive departments, national, state, and local; analysis of bureaucracy, administrative theory, budgeting. personnel, and administrative leadership. **[W]**

**POLS 3700-09. Special Topics in Contemporary Politics. (3).** Topics are varied and in online class listings.

**POLS 4101-6101. Political Statistics. (3). (Same as PADM 4101).** Introduction to analysis of quantitative data, and statistical hypothesis testing in the fields of political science and public and health administration. **[C]**

**POLS 4200-6200. Environmental Law, Policy and Regulation. (3).** Survey of the principal federal laws, policies and regulations concerning environmental use and protection.

**POLS 4211-6211. Constitutional Law: National Powers. (3).** Relationships and controls of three branches and nature of division of power between nation and states; emphasis on role of Supreme Court as arbiter in constitutional system. PREREQUISITE: POLS 1100 or permission of instructor. **[W]**

**POLS 4212-6212. Constitutional Law: The Origins and Evolution of Civil Liberties in the United States. (3).** Background, role, and legitimate extent of civil rights and liberties in the United States. PREREQUISITE: POLS 1100 or permission of instructor. **[G]** ♦

**POLS 4222-6222. Urban Politics. (3).** Roles and processes of politics and governance in urban America in contest of global, social; economic influences on cities and suburbs.

**POLS 4223-6223. Issues in Urban Politics. (3).** Selected issues in urban politics and policy.

**POLS 4226. Introduction to Nonprofit Organizations. (3). (Same as PADM 4226).** Critical understanding of historical development and impact of public sector, dynamic environment of nonprofit organization and current issues of importance to nonprofit decision makers.

**POLS 4230-6230. Legislative Internship. (3-12).** Supervised internship working with Tennessee General Assembly or other legislative bodies on current legislative programs. Seminar sessions to discuss and analyze problems with which interns are working. May be repeated for a maximum of 12 hours credit. PREREQUISITE: permission of department. (S/U).

**POLS 4231. Administrative Internship. (3-12). (Same as PADM 4231).** Supervised internship working with administrative branches of national, state, or local governments. Seminar sessions to discuss and analyze problems with which interns are working. May be repeated for a maximum of 12 hours credit. PREREQUISITE: permission of department. (A-F, IP)

**POLS 4305-6305. Post-Soviet Governments and Politics. (3).** Analysis of institutions, issues, processes and domestic policies of states comprising the former Soviet territory, with special emphasis on Russia and Ukraine. PREREQUISITE: POLS 1301.

**POLS 4307-6307. Government and Politics of Communist China. (3).** Institutions of government, political process, political elites, political groups and political socialization in Communist China. PREREQUISITE: POLS 1301.

**POLS 4312-6312. Government and Politics of Japan. (3).** Analysis of the political culture, government institutions, political processes and developmental changes on contemporary Japan. PREREQUISITE: POLS 1301.

**POLS 4315-6315. Revolution and Political Violence. (3).** Comparative analysis of forms and causes of political violence within nations; revolutions, ethnic conflict, secessionist movements, terrorism. PREREQUISITE: POLS 1301. **[W]**

**POLS 4317-6317. Transitions to Democracy. (3).** Comparison of transition from authoritarian rule to democracy in Latin America, Asia,

Africa, Eastern Europe; consideration of institutional design of democracy and impact of culture on democratic transition and consolidation. PREREQUISITE: POLS 1301. [I]

**POLS 4399. Research and Studies Abroad. (1-6).** Supervised field research and studies in selected foreign countries. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of the department. (A-F, IP)

**POLS 4401-6401. Modern Political Ideologies. (3).** Major ideologies affecting modern politics; ideologies of democracy, communism, and fascism as well as capitalism and socialism, racism, and nationalism, and ideologies of developing or "third" and "fourth world" nations. PREREQUISITE: PHIL 1101 or PHIL 1102 or POLS 1101 or POLS 1102 or permission of instructor.

**POLS 4405-6405. Origin and Development of American Political Thought. (3).** Origin and development of political thought in United States from colonial to present time; emphasis on relation between political thought and political institutions and practices. PREREQUISITE: PHIL 1101 or PHIL 1102 or POLS 1101 or POLS 1102 or permission of instructor. [G] ♦

**POLS 4415. African-American Political Thought to 1900. (3).** Thought of representative African-Americans upon fundamental questions of justice, right, persuasion, power and accommodation prior to the twentieth century. PREREQUISITE: POLS 1100 or POLS 1101 or POLS 1102.

**POLS 4416. African-American Political Thought from 1900. (3).** Thought of representative African-Americans upon fundamental questions of justice, right, persuasion, power and accommodation in the twentieth century. PREREQUISITE: POLS 1100 or POLS 1101 or POLS 1102.

**POLS 4504-6504. International Law. (3).** Nature, scope, duties, rights, and evolutionary trends of international law. PREREQUISITE: POLS 1501, or permission of instructor.

**POLS 4506. Problems of American Foreign Policy. (3).** Studies or problems of American foreign policy. May be repeated for a maximum 6 credit hours with permission of instructor. PREREQUISITE: POLS 1100 or POLS 1501. [I]

**POLS 4508-6508. Theories and Concepts in International Relations. (3).** Theoretical approaches to study of international politics; consideration of various schools of thought, methods, and substantive literatures. PREREQUISITE: POLS 1501, or permission of instructor. [W]

**POLS 4510-6510. Politics in a Global Economy. (3).** Consideration of manner in which political processes affect and are affected by economic processes at global level. PREREQUISITE: POLS 1501, or permission of instructor.

**POLS 4511-6511. International Conflict. (3).** Sources of conflict between nations; characteristics of international system, national attributes, decision making.

**POLS 4701. Policy Perspectives. (3).** Senior capstone seminar requiring students to analyze and solve series of problems in public policy. Students draw upon each subfield of discipline and utilize variety of skills and methods in addressing issues of domestic, foreign and comparative policy. PREREQUISITE: POLS 1100, or permission of instructor. [W,I]

**POLS 4702. Independent Study. (1-3).** Independent investigation of research problem or directed reading in selected area of political science under tutorial supervision of member of political science faculty. May be repeated for maximum of 6 hours credit. PREREQUISITE: permission of department chair. (A-F, IP)

**POLS 4709. Mock Trial Competition. (3).** Experiential learning about the U.S. legal system, jurisprudence, trial court procedure, and the work attorneys do. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.

**POLS 4710-19-6710-19. Special Topics in Political Science. (3).** Topics are varied and in online class listings.

**POLS 4820. Political History of Israel. (3). (Same as JDST 4820).** Interdisciplinary study of political stages in development of the State of Israel form mid 19th century to present time; key figures in the Zionist movement.

## (PSYC) PSYCHOLOGY

FRANK CRAGG LEEMING, Ph.D., *Interim Chair*
*Room 202, Psychology Building*

*http://www.psyc.memphis.edu/psych.htm*

**PSYC 1101. General Psychology I. (3).** Introduction to social aspects of psychology as a science of behavior; personality, emotion, abnormal behavior, treatment of psychological disorders, social and developmental psychology, psychological testing and applied psychology. Honors sections of this course are frequently available. [G]

**PSYC 1102. General Psychology II. (3).** Introduction to the biological aspects of psychology as a science of behavior; learning, sensation and perception, physiological and comparative psychology and psychopharmacology. Honors sections of this course are frequently available.

**PSYC 1200. General Psychology. (3).** Introduction to science of behavior; history of psychology, research strategies, biological bases of behavior, learning, memory, intelligence, motivation, emotion, personality, psychological disorders, techniques of therapy, applied psychology. Honors sections of this course are frequently available.

**PSYC 1300. Psychology as a Profession. (3).** Career options with in the field; clarification of post-baccalaureate goals. Students will complete a personal plan that specifies long-term goals and how to achieve those goals. PREREQUISITE: PSYC 1101, 1102, or 1200.

**PSYC 3001. Psychological Statistics. (4).** Introduction to use of statistics in psychology, with emphasis on elementary theory of measurement and computation; measures of central tendency and variability, tests of significance, correlation procedures, and an introduction to multivariate analyses, analysis of variance, and nonparametric procedures. *Three lecture hours, two laboratory hours per week.* PREREQUISITE: Completion of MATH 1410 and MATH 1420 or one of MATH 1830, MATH 1910, MATH 2000. [C]

**PSYC 3002. Introduction to Psychological Research. (4).** Survey of logical and methodological considerations common to all research and an overview of the range of observation, measurement and laboratory procedures employed, and presentations of their own research by various members of the faculty. *Three lecture hours, two laboratory hours per week.* PREREQUISITE: PSYC 3001. [W]

**PSYC 3101. Psychology of Personality. (3).** Introduction to development and functioning of normal person; variety of representative theoretical orientations examined; emphasis on psychoanalytic theories and other 20th century theoretical viewpoints.

**PSYC 3102. Abnormal Psychology. (3).** Basic concepts of psychopathology with emphasis on the development of behavior deviations, description of various neurotic and psychotic reactions, and an introduction to methods of psychotherapy.

**PSYC 3103. Child Psychology. (3).** Patterns of cognitive, interpersonal, and behavioral development from birth through early adolescence; psychological effects of genetic, organic and environmental influences as the child matures.

**PSYC 3104. Adult Psychology. (3).** Patterns of cognitive, interpersonal and behavioral development from late adolescence to old age; theoretical and empirical literature pertaining to such topics as marital and vocational choices, parenting, the midlife crises, and death.

**PSYC 3106. Social Psychology. (3).** Analysis of behavior and experience of individuals in group settings, examining such topics as leadership, social influence, and intergroup and intragroup relations.

**PSYC 3303. Thinking and Cognitive Processes.(3).** Overview of fields of cognitive psychology and cognitive science, including perception and attention, short and long-term memory, language, problem solving, reasoning, and decision making.

**PSYC 3304. Perceptual Psychology. (3).** Introduction to empirical and theoretical issues in perception; emphasis on classical and contemporary issues and approaches to perception pertaining to how informa-

tion from environment is transformed, organized, represented and used by the perceiver in adapting to physical world.

**PSYC 3305. Learning and Memory. (3).** Survey and analysis of basic processes involved in acquisition and retention of new behaviors and alteration of existing behaviors in animals and humans; examination of central theoretical concepts and issues in learning.

**PSYC 3306. Physiological Psychology. (3).** Survey of physiological processes underlying sensation, perception, motivation and emotion, motor systems, unlearned and learned behavior patterns, memory and other psychological functions.

**PSYC 3307. Animal Behavior. (3).** Synthesis of comparative psychological and ethological approaches to study of animal behavior; behavior genetics, species specific behaviors, behavior as a basis for phyletic classification, and major behavioral dimensions related to phylogenesis.

**PSYC 3503. Introduction to Clinical Psychology. (3).** Advanced seminar for students considering graduate study in this area; clinical assessment, diagnosis, intervention, with research in behavioral medicine, forensic, child clinical psychology. PREREQUISITE: PSYC 3001, PSYC 3002, PSYC 3102, or permission of instructor.

**PSYC 3505. Psychological Tests and Measurement. (3).** Introduction to psychometric concepts, statistics, principles, and practices of test and scale construction, evaluation, use, and interpretation.

**PSYC 3506. Human Sexuality. (3).** Survey of existing knowledge of human sexual behavior; physiological, anatomical, psychological and cultural components; normative sexual functioning; such topics as sexual deviation, sexual dysfunctions, and types of treatment are also considered. PREREQUISITE: PSYC 1101 and 1102.

**PSYC 3507. Alcohol, Drugs and Behavior. (3).** Survey of major drugs of abuse, their mode of action, and their behavioral effects, both acute and chronic; etiology and maintenance of drug abuse and review of prominent strategies for prevention, intervention and treatment.

**PSYC 3508. Industrial and Organizational Psychology. (3).** Application of psychological concepts and methods to phenomena in industrial and organizational settings, with emphasis on personnel selection, classification and evaluation, employee attitudes, morale and motivation, and psychological analysis of the condition of work.

**PSYC 3509. Applying Psychology in the Community. (3).** Principles of psychology applied to real-life, community issues; methodologies and techniques, with emphasis upon the behavior analytic approach; descriptions and discussions of actual programs addressing a variety of community issues such as youth violence, traffic safety, and productivity in the workplace.

**PSYC 3510. Deviance: Its Role in History and Culture. (3). (2201).** Introduction to concept of deviance from prehistory to present; emphasis on vilification and glorification of deviant behavior according to time, place and customs. **[G]**

**PSYC 4010-29. Special Topics in Psychology. (1-3).** Topics are varied and in online class listings.

**PSYC 4030. Issues in Psychotherapy Research. (3).** Examination of research evidence pertaining to basic questions about psychotherapy and its effectiveness. Readings include both classic contributions and current research findings.

**PSYC 4032. Research Methodology. (3).** Discussion of advanced topics in methodology. In addition, student completes all phases of a research project, including question formulation, literature review, design, data analysis, and report writing. Research projects evolve from individual student interests. PREREQUISITE: PSYC 3002, or permission of the instructor.

**PSYC 4034. Children's Social Relationships. (3).** Examines children's social relationships, particularly peer relationships; social cognitive processing; developmental implications of group status and dyadic friendships; behavioral interactions among peers; impact of reputation on peer group status; gender differences in peer relations; parent management of peer activities; and analyses of conflict and of aggressors and their victims. PREREQUISITE: successful completion of a course in child psychology and permission of instructor.

**PSYC 4040-49. Honors Special Topics. (3).** Topics are varied and in online class listings.

**PSYC 4101. History of Psychology. (3).** Comprehensive survey and critical analysis of the philosophical and scientific antecedents of contemporary psychology. PREREQUISITE: PSYC 3001, 3002, and three hours in 3100 series and three hours in 3300 series. Enrollment preference granted to seniors in their final semester. **[I]**

**PSYC 4305. Mind, Brain, and Intelligence, Honors. (3). (Same as UNHP 4302, UNIV 4520).** Interdisciplinary studies of cognition, behavior, emotion, intelligence, and brain mechanisms; synthesis of research contributions from cognitive science, neuroscience, artificial intelligence, and philosophy.

**PSYC 4503. Special Problems in Psychology. (1-3).** Student, under faculty supervision, may read intensively in specialized area, conduct psychological research and/or, obtain field experience in community institutions where psychological principles are applied. NOTE: PSYC 4503 and PSYC 4504 may be taken for a combined total of 9 hours credit; no more than 6 hours credit may be with the same faculty member. PREREQUISITE: permission of department. (S/U).

**PSYC 4504. Directed Research. (3).** Majors receive first hand research experience under tutorship of individual faculty member. Students may work individually or in small groups depending upon project. Projects conform to set of guidelines available from department. NOTE: PSYC 4503 and PSYC 4504 may be repeated for a combined maximum of 9 hours credit; no more than 6 hours credit may be with the same faculty member. PREREQUISITE: permission of department. (S/U).

**PSYC 4505. Special Problems in Behavioral Neuroscience. (3).** Specialized reading and research conducted under direction of faculty supervisor and with approval of behavioral neuroscience committee. NOTE: PSYC 4505 and 4506 may be taken for a combined total of 9 hours credit; no more than 6 hours credit may be with the same faculty member. (A-F, IP)

**PSYC 4506. Directed Research in Behavioral Neuroscience. (3).** Individual or group research conducted under direction of faculty supervisor and with approval of behavioral neuroscience committee. NOTE: PSYC 4505 and 4506 may be taken for a combined total of 9 hours credit; no more than 6 hours credit may be with the same faculty member.

**PSYC 4507. Internship in Psychology. (3).** Supervised field placement in department-approved sited. *Thirty (30) classroom hours and 120 placement hours.* May be repeated for a maximum of 6 hours credit. PREREQUISITE: PSYC 3001 and 3002, permission of instructor, completion of 55 or more credit hours, and overall and psychology GPA of 3.0 or better.

**PSYC 4996. Honors Senior Thesis. (3).** Original research conducted under direction of faculty supervisor, and with approval of Honors Committee. PREREQUISITE: admission to Honors Program. (S/U)

**PSYC 4997. Senior Thesis in Behavioral Neuroscience. (3).** Original research conducted under direction of faculty supervisor and with approval of behavioral neuroscience committee. PREREQUISITE: permission of behavioral neuroscience advisor.

## (RUSS) RUSSIAN

### Department of Foreign Languages and Literatures

RALPH ALBANESE, Ph.D., *Chair*
*Room 375, Dunn Hall*
*http://fl.memphis.edu*

**RUSS 1010. Elementary Russian I. (3). (1101).** Introductory survey of Russian grammar and phonetics. ♦

**RUSS 1020. Elementary Russian II. (3). (1102).** Continuation of RUSS 1010. PREREQUISITE: RUSS 1010, or permission of instructor. ♦

**RUSS 2010. Intermediate Russian I. (3). (2201).** Comprehensive review of Russian grammar, exercises in spoken and written Russian. PREREQUISITE: RUSS 1020, or permission of instructor. ♦

**RUSS 2020. Intermediate Russian II. (3). (2202).** Continuation of RUSS 2010. PREREQUISITE: RUSS 2010, or permission of instructor. ♦

**RUSS 3301. Russian Conversation and Composition (3).** Development of advanced oral and written communication skills. PREREQUISITE: RUSS 2020, or permission of instructor.

**RUSS 3302. Russian Conversation and Composition (3).** Continuation of RUSS 3301. PREREQUISITE: RUSS 3301, or permission of instructor.

**RUSS 3441. Early Nineteenth-Century Russian Literature. (3).** Survey of major writers and works of the first half of the 19th century, including Pushkin and Gogol.

**RUSS 3442. Nineteenth-Century Russian Realism. (3).** Survey of major writers and works of the last half of the 19th century, including Dostoevskii and Tolstoi.

**RUSS 3443. Twentieth-Century Russian Prose. (3).** Survey of Russian literature since 1900, including selected writers and works of the prerevolutionary and Soviet periods and Russian emigre literature.

**RUSS 3611. Survey of Russian Civilization. (3).** Russia and its people; highlights of Russian civilization as revealed in the fields of literature, music, painting and architecture. May not be used for Russian language credit.

**RUSS 3791. Russian for Commerce I. (3).** Russian business terminology and forms of correspondence; regular reading of business, commercial, and technical publications. PREREQUISITE: RUSS 2020, or equivalent.

**RUSS 3792. Russian for Commerce II. (3).** Continuation of RUSS 3791. PREREQUISITE: RUSS 3791, or equivalent.

**RUSS 4309. The Art of Translating Russian. (3).** PREREQUISITE: RUSS 2020, or permission of instructor.

**RUSS 4780. Individual Studies in Russian. (1-3).** Directed individual study in selected areas of Russian chosen in consultation with instructor. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor. (A-F, IP)

**RUSS 4791-99. Special Topics in Russian. (3).** Topics are varied and in online class listings. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.

## (SLC) SPORT AND LEISURE COMMERCE

### Department of Human Movement Sciences and Education

MICHAEL H. HAMRICK , Ed.D., *Chair*
*Room 106, Elma Neal Roane Fieldhouse*
*http://www.hmse.memphis.edu/*

**SLC 4102-11-6102-11. Special Topics Workshop in Sport and Leisure Commerce. (1-6).** Selected phases of sport and leisure commerce through group study, in-depth study in area of interest and need for leaders in sport and leisure commerce. May be repeated with change in topic. Topics are varied and in online class listings.

**SLC 4902-11-6902-11. Special Topics in Sport and Leisure Commerce (1-3).** Current topics in sport and leisure commerce. May be repeated with change in topic. Topics are varied and in online class listings.

## (SLS) SPORT AND LEISURE STUDIES

### Department of Human Movement Sciences and Education

MICHAEL H. HAMRICK , Ed.D., *Chair*
*Room 106, Elma Neal Roane Fieldhouse*
*http://www.hmse.memphis.edu/*

**SLS 2105. Foundations of Sport and Leisure Studies. (3).** Explores and analyzes sport and leisure from philosophical, historical, and organizational perspectives; prefatory work on professional development portfolio that addresses skills, knowledge, attitudes, and behaviors inherent to interrelated and diverse fields of sport and leisure studies. This course may be taken to improve the grade for one, but not both, of the former courses. COREQUISITE: SLS 2605.

**SLS 2605. Field Experience in Sport and Leisure Studies. (1-3).** Allows students entering Sport and Leisure Studies program early, supervised practical experiences in a variety of sport and leisure service areas. COREQUISITE: SLS 2105. S/U.

**SLS 3005. Computer Applications in Sport and Leisure. (3).** History and application of computers and information systems; emphasis on hardware and software relevant to sport and leisure programs as well as applications of common computer programs to specific leisure service and sport management situations. [C]

**SLS 3103. Outdoor Recreation and Education for Urban America. (3).** Analysis of concepts and issues associated with outdoor recreation and education with an emphasis on urban citizen; outdoor recreation behavior in terms of individual dynamics of participation, resources for outdoor recreation, outdoor education, and outdoor leadership; achieves balance among practical information, theory, and information from current research. This course may be taken to improve the grade for one, but not both, of the former courses.

**SLS 3104. Commercial Recreation and Tourism. (3).** Survey of urban commercial recreation with special emphasis on travel and tourism; sport and athletics, theaters, fitness centers, amusement and theme parks, aquatic areas, risk recreation, and historical areas, as well as the travel and tourism industry.

**SLS 3105. Sport and Leisure as Popular Culture. (3).** The analysis of the production and consumption of sport and leisure as an aspect of contemporary popular culture; relationship between sport and leisure and the economy, the media, politics, and the experience of class, race, gender, ethnicity, and nationality.

**SLS 3202. Park and Recreation Resource Management. (3).** Management, operation, and maintenance of areas and facilities within field of recreation and parks; identification, acquisition, allocation, development, and management of land and water resources through environmentally sound techniques.

**SLS 3204. Organizational Dynamics in Sport and Leisure. (3).** Analysis of the organization and administration of sport and leisure service organizations; organizational structuring: goals, objectives, and policy development; planning process; personnel development; risk management conflict resolution as applied to sport and leisure services; theories of organization covered in course's prerequisite. This course may be taken to improve the grade for one, but not both, of the former courses. PREREQUISITE: MGMT 3110.

**SLS 3205. Area and Facility Management. (3).** Planning, development, and maintenance of sport and leisure facilities; inspection, comprehensive recreation surveys, and planning a layout. This course may be taken to improve the grade for one, but not both, of the former courses.

**SLS 3305. Leisure and Recreation Program Development. (3).** Planning techniques in regard to citizen surveys, leisure and recreation needs analysis, leisure and recreation activity selection, and leisure and recreation program design, promotion, and evaluation.

**SLS 3600. Event Management. (3).** Basic concepts pertaining to the production of sporting events, both amateur and professional; planning, organizing, publicizing, and conducting an event. PREREQUISITE: SLS 2105, 3205, and 3305.

**SLS 3605. Financial Management in Sport and Leisure. (3).** Basic finance and accounting applied to managerial control of sport and leisure organizations; feasibility analysis, formulation and development of operating budgets, financial forecasting, ownership models, taxation issues, and revenue production. PREREQUISITE: SLS 2105.

**SLS 3650. Sport Information and Public Relations. (3).** Basic knowledge and understanding of media relations in both amateur and professional sport; special emphasis is placed on building and maintaining an effective media relations program; writing for media,

public relations, and business communications. PREREQUISITE: JOUR 3400, SLS 2105.

**SLS 3905. Leisure and Recreation for People with Disabilities. (3).** Examination of role of leisure and recreation for persons with special needs including individuals with physical, emotional, mental, and social disabilities.

**SLS 4001. Park and Recreation Visitor Management. (3).** Visitor management as it relates to design and management of visitor interpretive and educational services; attended and unattended services including interpretive talks, living interpretation, audio devices, self-guided tours, exhibits, and educational publications. This course may be taken to improve the grade for one, but not both, of the former courses.

**SLS 4105. Leadership in Leisure Services. (3).** Concepts of leisure leadership through group discussion, activity, role playing, gaming, lecture, and class projects. Culminates professional development portfolio of SLS 2105. Students unable to complete professional development portfolio while enrolled in this class will receive (IP) grades. PREREQUISITE: SLS 2105, or permission of instructor. **(A-F, IP)**

**SLS 4125. Gender, Race, and Class Considerations in Urban Sport and Leisure. (3).** Socially constructed categories of class, race, and gender, and their influence on perceptions of the body; way these categories shape institutionalization, practice, and representation of sport and leisure is discussed with an emphasis on promoting unbiased and non-prejudicial sport and leisure cultures. PREREQUISITE: SLS 3105, or permission of instructor.

**SLS 4135. Sport and Popular Culture in Global Perspective. (3).** Nature, meaning, and significance of sport, leisure, and popular culture across selected nations. Identification and systematic analysis of persistent problems in American sport and popular culture as well as cultural interstices in emerging global village; cultural conflict, cultural resistance, and cultural imperialism. PREREQUISITE: Social Sciences requirement, SLS 3105, or permission of instructor.

**SLS 4145. The Cultural Formation of Sport in Urban America. (3).** Sociocultural foundations of American sport in urban environment; reciprocal relationship between sport, urban structure and process explored in context of industrial, modern, and postmodern American city; sport in relationship to walking city; radial city; suburban city; cause or panacea for urban ills; community cohesion, and urban identity; urban politics; capitalism, and city taxpayer; economic impact on the city; and, urban renewal. PREREQUISITE: HIST 2020, SLS 3105, or permission of instructor.

**SLS 4155. Problems in Urban Sport. (3).** Analysis of causes and consequences of contemporary problems in urban sport; case-study approach used to examine social, political, and economic factors influencing structure and experience of sport in American cities; emphasis on formulating solutions and potential strategies to address identified problems. Culminates professional development portfolio of SLS 2105. Students unable to complete their professional development portfolio while enrolled in this class will receive IP grades. PREREQUISITE: SLS 2105, 3105, 4145, or permission of instructor. **(A-F, IP)**

**SLS 4165. Sport, Leisure, Commerce and the Global City. (3).** Synergies and disjunctures between the U.S. and global sport and leisure marketplace. PREREQUISITE or COREQUISITE: SLS 3105, or permission of instructor.

**SLS 4175. International Perspectives on the Management of Sport and Leisure Organizations. (3).** Management of sport and leisure organizations in a global context. PREREQUISITE: permission of instructor.

**SLS 4205. Legal and Ethical Aspects of Sport and Leisure. (3).** Legal and statutory regulations relevant to sport and leisure programs in urban context; emphasis placed on promotion of ethical decision-making and practices in field of sport and leisure; developing statement of principles/values, and code of ethics; identification and compliance with relevant legal and statutory regulations; contracts; trademarks, licensing, and copyright. PREREQUISITE: Historical/Philosophical Heritage requirement, SLS 3204, 3305, or permission of instructor.

**SLS 4500. Sport and Leisure Marketing. (3). (SLS 4005).** Basic marketing concepts with applications to the uniqueness of the sport and leisure industry; event marketing, sponsorship, licensing, sport information and public relations. PREREQUISITE: JOUR 3400, MKTG 3010, SLS 2105, and 3105.

**SLS 4605. Internship in Sport and Leisure Studies. (3-9).** Culminating experience allowing students the opportunity to demonstrate knowledge and skills in an appropriate professional setting based upon their training and experience. Represents a culminating experience and can only be conducted when all other course work is complete. PREREQUISITE: senior status and permission of instructor. COREQUISITE: HMSE 4999. (S/U).

## (SOCI) SOCIOLOGY

### Department of Sociology

YORK BRADSHAW, Ph.D., *Chair*
*Room 231, Clement Hall*
*http://cas.memphis.edu/sociology*

**Sociology 1111 is a prerequisite for all other courses in Sociology except 2100 and 2101.**

**SOCI 1111. Introductory Sociology. (3).** Introduction to concepts, methods and theoretical perspectives in sociology; basic principles of sociological reasoning introduced through lectures, reading assignments, and micro-computer instruction. **[G]**

**SOCI 2100. Sociology of International Development. (3).** Social change in an increasingly interdependent world; introduction to development theory and how relations among countries condition changes within them; cultural conflict, social inequality, education and ideology, industrialization, urbanization, multi-national corporations, population problems, quality of life indicators. **[G]**

**SOCI 2101. The Family in Global Perspective. (3). (Same as CSED 2101).** Introduction to family as a primary, global, social institution; contributions sociology, anthropology, and family and consumer sciences have made to understanding how and why family systems vary worldwide and common bonds and problems facing families in modern societies. **[G]**

**SOCI 3112. Contemporary Social Problems. (3).** Sociological approaches to understanding contemporary social problems; magnitude, causes, consequences, and possible solutions to various problems such as poverty, racism, sexism, problems of aging, crime, and population.

**SOCI 3311. Social Statistics. (3).** Application of basic statistical concepts and techniques to social analysis; description of data for single variables and for relationships between two variables; tests of significance for relationships between two variables involving sample data; use of packaged statistical computer programs for single- and two-variable analysis. **[C]**

**SOCI 3322. Methods of Social Research. (3).** Overview of process of social research; selection and formulation of problem, design of research, methods of investigation, analysis and interpretation of data, and report preparation; emphasis on data collection techniques. PREREQUISITE: SOCI 3311.

**SOCI 3401. Social Inequality. (3).** Unequal distribution of power, property, and prestige and social relations of dominance and subordination in the American class system; how and why this inequality develops and persists; differences in life chances and options across different social classes.

**SOCI 3420. Sociology of the South. (3).** Political economy and major institutions in the South and implications for different races and classes; the South since World War II, including the Civil Rights movement.

**SOCI 3422. Racial and Ethnic Minorities: A Socio-Historical Approach. (3).** Comparative study of racial and ethnic minorities in

United States, how inequality is institutionalized in such areas as employment, education, political participation, and social relations; emphasis on how subordinate groups resist oppression and initiate social change. [G]♦

**SOCI 3432. Sociology of Gender. (3).** Traditional conceptions of masculinity and femininity and modifications of these resulting from economic, demographic and cultural changes; socialization for masculine and feminine roles and variations in these roles throughout life cycle; class, race, occupational and other institutional differences in sex roles.

**SOCI 3501. Sociology of Deviant Behavior. (3).** Problems in applying definitions of deviance in everyday life; theories about causes and consequences of deviance critically reviewed; types of deviance analyzed, ranging from interpersonal violence to various forms of sexual expression.

**SOCI 3541. Criminology. (3).** Nature and significance of criminality; etiology of illegal behavior; trends in social reactions to crime and criminals; evolution of biological, psychological, and sociological theories of criminal behavior.

**SOCI 3701. Individual and Society. (3).** Basic theory and research dealing with study of human behavior in social situations; emphasis on communication processes, socialization, social roles, social self, and interaction in group contexts.

**SOCI 3820. Sociology of Education. (3).** Sociological analysis of education and its functions, school and community relationships; problems of social change and educational adjustments.

**SOCI 3831. Marriage and the Family. (3).** American family patterns, including mate-selection, man-woman relationships, marital satisfaction, parent-child communication, divorce, alternative lifestyles and other contemporary issues.

**SOCI 3860. Sociology of Religion. (3).** Role of religion in modern society; relationship between religion and other spheres of life; sociological examination of cults, sects, churches, and religious movements; causes and consequences of religious beliefs and practices.

**SOCI 3940. Social Change. (3).** Sociological analysis of theory, nature, meaning, and consequences of social change.

**SOCI 4210. Rise of Sociological Theory. (3).** Nature, grounds, and explanatory powers of various forms of sociological theory; analysis of bases for scientific and philosophical assumptions and social and political contexts; major theorists including Durkheim, Marx, Weber, Simmel.

**SOCI 4211-6211. Contemporary Sociological Theory. (3).** Major frameworks of 20th century sociological thought, including theoretical schools of functionalism, exchange theory, critical theory, symbolic interactionism, phenomenological sociology, and ethnomethodology; current social and political trends and issues.

**SOCI 4312-6312. Intermediate Social Statistics. (3).** Multivariate analysis of social data; use of computer programs for data management and statistical analysis. PREREQUISITE: SOCI 3311, 3322, or equivalent, or permission of the instructor.

**SOCI 4420. Racial Inequality. (3).** Relations of dominance and subordination in the United States; social and political experiences of African Americans, Asian Americans, and Latinos, especially strategies employed to resist oppression and reduce inequality.

**SOCI 4442. Sociology of Poverty. (3).** Structural sources of inequality and how experiences of poverty are shaped by race, gender and age. [W]

**SOCI 4460. Black and White Women in the South. (3).** How history of South and political-economic structure has shaped black and white women's work, family, community activities, and relationships; emphasis on collaboration and competition aspects, identity issues, and demographic characteristics; focus on the Memphis area. [W]

**SOCI 4541. Sociology of Aging. (3).** Ageism in sociocultural contexts; current beliefs, values, and norms regarding aging; structural location of aging in society; and implications of ageism in employment, poverty, private and institutional housing, crime, physical illness and mental illness.

**SOCI 4631. Cities in Change. (3).** Historical transformation of urban communities; effects of urbanism on behavior; patterns of class, race and ethnic segregation in American cities; growth and decline of cities in relation to social, political, and economic forces, global patterns of urbanization: causes and consequences. [W]

**SOCI 4641. Sociology of the Global Environment. (3).** Examination of interactions between physical environment in which we live and human societies which we have created; emphasis on crises of global environment and efforts toward sustainable development.

**SOCI 4642. Culture and Modernization of East Asia. (3).** Sociological examination of impact of cultural traditions embedded in East Asian worldview on economic modernization of Japanese, Korean, and Chinese societies; emphasis on significance of alternative paths to global economy.

**SOCI 4842-6842. Sociology of Occupations and Professions. (3).** Sociological analysis of division of labor, occupational groupings, career patterns, and professional associations in modern American society; meaning of work.

**SOCI 4851. Medical Sociology. (3).** Examination of human arrangements and their human legitimations within which variations in human biology are discovered, defined, diagnosed, described, and disposed of as "disease."

**SOCI 4852. Sociology of Mental Illness. (3).** Definition, taxonomy, models; epidemiology, demographics of class, age, sex, race, residence, marital status; personal experience, social stigma; explores expression of emotions, assertiveness training, anger management, suicide, codependency, divorce recovery, alcoholic family roles; surveys sociotherapeutic responses; social stress.

**SOCI 4900-09-6900-09. Special Topics in Sociology. (3).** Topics are varied and in online class listings.

**SOCI 4912. Directed Individual Study. (1-6).** Individually directed advanced reading and/or research in special areas of interest. May be repeated for maximum of 6 hours credit. PREREQUISITE: permission of department chair. (A-F, IP)

**SOCI 4923. Social Institutions and the Life Cycle. (3).** Analysis of social institutions from life cycle perspective; social institutions studied from perspective of their specific function for and appropriateness to specific stages of life cycle development. [W]

**SOCI 4980-89. Honors Special Topics in Sociology. (3).** Topics are varied and in online class listings. May be repeated for a maximum of 9 hours credit. PREREQUISITE: admission to Honors Program in Sociology.

**SOCI 4998. Honors Thesis. (3).** Original research conducted under the direction of a faculty mentor. May be repeated in successive semesters for a maximum of 6 hours credit. PREREQUISITE: admission to Honors Program in Sociology.

**SOCI 4999. Senior Thesis Seminar. (3).** Analysis of process and practice of sociological inquiry; emphasis on integration of sociological theory, research methods, statistics, and knowledge of a substantive area through formulation and completion of original research project. Research problem will be formulated and executed by student with consultation and supervision of instructor. PREREQUISITE: SOCI 3311, 3322, 4210 or 4211, and nine upper division hours. [W,I]

## (SPAN) SPANISH

### Department of Foreign Languages and Literatures

RALPH ALBANESE, Ph.D., *Chair*
*Room 375, Dunn Hall*
*http://fl.memphis.edu*

**SPAN 1010. Elementary Spanish I. (3). (1101).** Basic skills fundamental to language proficiency and culture. ♦

**SPAN 1020. Elementary Spanish II. (3). (1102).** Further development of basic skills fundamental to language proficiency and culture. PREREQUISITE: SPAN 1010, or equivalent. ♦

**SPAN 2010. Intermediate Spanish I. (3). (2201).** Comprehensive review of Spanish grammar, exercises in writing conversation, and readings in Hispanic literature and culture. PREREQUISITE: SPAN 1020, or equivalent. ♦

**SPAN 2020. Intermediate Spanish II. (3). (2202).** More advanced readings. PREREQUISITE: SPAN 2010 or equivalent. ♦

**SPAN 3301. Conversation. (3).** Designed to help students develop oral proficiency; diverse opportunities for self-expression. Not intended for students with native or near-native proficiency in Spanish. PREREQUISITE: SPAN 2020, or equivalent.

**SPAN 3303. Composition. (3).** Designed to develop adequate writing skills; compositions analyzed to identify and avoid frequent grammatical errors and to avoid interference from English. Not intended for students with native or near-native proficiency. PREREQUISITE: SPAN 2020, or equivalent.

**SPAN 3311. Intermediate Conversation. (3).** Designed to develop strong conversational and listening skills; wide variety of activities, exposure to different pronunciations and native conversational speed; selected readings to help expand vocabulary. Not intended for students with native or near-native proficiency. PREREQUISITE: SPAN 3301, or permission of instructor.

**SPAN 3312. Advanced Conversation. (3).** Further vocabulary expansion, precision in diction, and ability to express and understand nontechnical subjects. Required of majors and minors. PREREQUISITE: SPAN 3311, or permission of instructor.

**SPAN 3313. Advanced Composition. (3).** Designed to develop strong command of written language; emphasis on style, organization and exposition of content as opposed to grammatical analysis. PREREQUISITE: SPAN 3303, or permission of instructor.

**SPAN 4302-6302. Advanced Grammar. (3).** Special problems in grammar; recommended for majors and minors. PREREQUISITE: 3000 level Spanish course, or equivalent.

**SPAN 4306-6306. Applied Spanish Linguistics. (3).** Current research in linguistics, psycholinguistics and sociolinguistics and their contribution to second language teaching and second-language learning.

**SPAN 4410-6410. Spanish Literature and Civilization. (3).** Survey of literary movements and major figures with readings in literature and civilization. Required of majors. PREREQUISITE: 3312, or equivalent.

**SPAN 4431-6431. Contemporary Spanish Prose. (3).** Spanish prose from Generation of 1898 to present. PREREQUISITE: SPAN 4410, or permission of instructor.

**SPAN 4432. Contemporary Spanish Poetry and Drama. (3).** Spanish poetry and drama from Generation of 1898 to present. PREREQUISITE: SPAN 4410, or permission of instructor.

**SPAN 4510-6510. Spanish American Literature and Civilization. (3).** Survey of literary movements and major figures with readings in literature and civilization. Required of majors. PREREQUISITE: SPAN 3312 or equivalent.

**SPAN 4561. Pre-Contemporary Spanish American Prose Fiction. (3).** Development of Spanish American novel and short story from beginnings through 20th century. PREREQUISITE: SPAN 4510.

**SPAN 4562. Contemporary Spanish American Prose Fiction. (3).** Spanish American novel and short story of 20th century. PREREQUISITE: SPAN 4510.

**SPAN 4563-6563. Spanish Literary Genres. (3).** Spanish peninsular literature; origins to present time; emphasis on textual analysis. PREREQUISITE: SPAN 4410, or permission of instructor.

**SPAN 4701. Spanish for Commerce I. (3).** Spanish business terminology and correspondence. PREREQUISITE: 3000-level Spanish course or permission of instructor.

**SPAN 4702. Spanish for Commerce II. (3).** Business concepts and documents. PREREQUISITE: 3000 level Spanish course or permission of instructor.

**SPAN 4780. Individual Studies in Spanish. (1-3).** Directed individual study in selected areas of Spanish chosen in consultation with instructor. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor. (A-F, IP)

**SPAN 4790-99. Special Topics in Literature and Linguistics. (3).** Topics are varied and in online class listings. May be repeated for maximum of 6 hours credit. PREREQUISITE: permission of instructor.

## (SPED) SPECIAL EDUCATION

### Department of Instruction and Curriculum Leadership

DENNIE L. SMITH, Ed.D., *Chair*
*Room 106D, E.C. Ball Hall*

*http://www.coe.memphis.edu/coe/ICL/icl.html*

**SPED 2000. Issues of Human Diversity. (3).** Overview of special education including historical and legal perspectives of the field, characteristics of each exceptionality, and educational and community services utilized by exceptional persons and their families. *Five hours field experience.*

**SPED 3002. Independent Study in Special Education. (1-6).** Opportunity for self-directed study and/or research under supervision. PREREQUISITE: permission of department. (A-F, IP)

**SPED 3201. Behavioral Support for Students in Diverse Settings. (3).** Identification and education of students with behavioral excesses, including those who have been certified as seriously emotionally disturbed; causative factors, characteristics, appropriate educational placement alternatives and practices. Practicum (30 hrs.) with students with emotional/behavioral disorders and/or pervasive developmental disorders. PREREQUISITE: SPED 2000.

**SPED 3401. Academic Support for Diverse Learners. (3).** Historical and current practices in providing services for students with learning disabilities and related learning problems; characteristics, current research-based instructional practices; special education teacher's role in implementing support services. Practicum (30 hrs.) with students with learning disabilities. PREREQUISITE: SPED 2000.

**SPED 3501. Support for Students with Mental Retardation. (3).** Definitions, etiology, and characteristics associated with mild to severe mental retardation; examination of evaluation, services and strategies used in educational, prevocational, and transitional settings; access and use of assistive technology. Practicum (30 hrs.) with students with mental retardation. PREREQUISITE: SPED 2000.

**NOTE: SPED 3800, 3801, 3802, and 3803 must be taken as Corequisites. The Prerequisites for this sequence are SPED 2000, 3201, 3401, 3501, ECED 4500, ELED 4240, 4242, and admission to TEP.**

**SPED 3800. Methods, Materials and Curriculum for Learners with Mild Disabilities. (3).** Curriculum, methods, and materials applicable to special educational needs of learners with mild disabilities in primary, intermediate and secondary levels; emphasis on programming techniques and implementation of appropriate interventions in special education or regular settings. PREREQUISITE/COREQUISITE: See NOTE above.

**SPED 3801. Practicum with Learners Having Mild Disabilities. (3).** Planning and implementation of special education methods and materials with learners having mild disabilities. PREREQUISITE/COREQUISITE: See NOTE above. (S/U).

**SPED 3802. Assessment of Learners with Disabilities. (3).** Tests and measurements used with learners having disabilities; diagnostic achievement testing as related to instructional planning. Includes other major assessment instruments and procedures used in evaluation of mild to severe exceptionalities. PREREQUISITE/COREQUISITE: See NOTE above.

**SPED 3803. Behavior Management for Learners with Disabilities. (3).** Advanced strategies for managing social behaviors of learners with mild to severe disabilities; techniques for eliminating maladaptive behaviors, managing aggressive and antisocial students, and teaching appropriate social skills. PREREQUISITE/COREQUISITE: See NOTE above.

**SPED 4000-6000. Methods, Materials and Curriculum for Learners with Moderate/Severe Disabilities. (3).** Curriculum, methods, and materials applicable to special educational needs of learners with moderate to severe disabilities; emphasis on educational and vocational skills that facilitate normalization and independent living. PREREQUISITE: SPED 3501 or 4601. COREQUISITE: SPED 4001.

**SPED 4001. Practicum with Learners Having Moderate/ Severe Disabilities. (3).** Planning and implementation of special education methods and materials with learners having moderate to severe disabilities. PREREQUISITE: SPED 3800, 3801. COREQUISITE: SPED 4000. (S/U).

**SPED 4101-10. Special Topics in Special Education. (1-3).** Topics are varied and in online class listings.

**SPED 4513-6513. Assistive Technology, Transition Issues, and Community Based Instruction. (3).** Transition issues, life skills, vocational education to prepare students having significant exceptionalities for community living; legal and family concerns; effective transition programming; familiarity with available community resources and interagency collaboration; augmentative/alternative communication. PREREQUISITE: SPED 3501 or 4900.

**SPED 4601-6601. Accommodations for Students with Physical/Health Disabilities. (3). (3601).** Educational and environmental modifications; accommodations to facilitate learning and vocational skills in general and special education; characteristics and etiology of mild to severe physical/health disabilities; supportive educational, medical, therapeutic interventions. Practicum (30 hrs.) with students with physical/health disabilities. PREREQUISITE: SPED 2000. **(F).**

**SPED 4801-10-6801-10. Workshop in Special Education (1-9).** For professionals in field of special education. Intensive examination of current methodologies, research, issues and trends in various areas of exceptionalities. See *Online Class Listings* for specific workshop title.

**SPED 4900-6900. Consultation with School/Family/Community. (3).** Professional development issues which impact on educator interaction with students, parents and other professionals, including the development of communication and consultation skills. Practicum included.

## (SWRK) SOCIAL WORK

### SCHOOL OF URBAN AFFAIRS AND PUBLIC POLICY

### Division of Social Work

JEROME BLAKEMORE, Ph.D., Director
*Room 114, McCord Hall*
*http://cas.memphis.edu/socialwork/*

**SWRK 2910 and 2911** are prerequisites for all other courses in the Division of Social Work; may be taken after earning 40 credit hours, as specified in the note accompanying the requirements for the major; and are required of Social Work Majors.

**SWRK 2910. Social Work Profession and Practice. (3).** Overview of social work as profession, including introduction to its value base, knowledge base, and skill base; and roles of social workers in social service agencies. Community laboratory experience required. *Two and one-half lecture hours, one and one-half laboratory hours per week.* NOTE: The following courses are to be taken prior to or concurrently with SWRK 2910: ENGL 1020; ANTH 1200; and two courses, with a minimum grade of "C", from the following: SOCI 1111, PSYC 1200, POLS 1100, or ECON 2120.

**SWRK 2911. Social Response to Human Need. (3).** Introduction to historical and contemporary issues related to American social welfare systems; analysis of impact on vulnerable populations, value implications, change processes, and culturally-relevant concepts of need. Volunteer experience required. NOTE: The following courses are to be taken prior to or concurrently with SWRK 2911; ENGL 1020; ANTH 1200; and two courses, with a minimum grade of "C", from the following: SOCI 1111, PSYC 1200, POLS 1100, or ECON 2120.

**SWRK 3902. Human Behavior and Social Environment. (3).** Overview of human development from birth through old age; focus on interaction of biological, psychological, and socio-cultural factors; major developmental theories, transitional phases, and variant lifestyles; relevance to social functioning and social work practice. PREREQUISITE: SWRK 2910 or 2911 and BIOL 1010/1011, or permission of instructor.

**SWRK 3903. Social Work Practice I. (4).** Overview of traditional social casework methodology; emphasis on theoretical approaches and generalist practice; beginning applications of case study model. PREREQUISITE: SWRK 2910, 2911, 3902, or permission of director.

**SWRK 3904. Social Work Practice II. (3).** Continuation of SWRK 3903, with emphasis on application of theory through assessment, intervention planning, use of community resources, and functions of social workers; extensive case analysis. PREREQUISITE: SWRK 3903.

**SWRK 3906. Social Work Practice III. (3).** Theory and application of group dynamics concepts as applied to individual in group, committee and community structures and functions, roles of social worker in these settings. PREREQUISITE: SWRK 2910, 2911, and 3903. COREQUISITE: SWRK 4830 and 4840.

**SWRK 3920. Social Welfare Policies and Programs: Theory and Application. (3).** Overview of social welfare policy development and methods; programs resulting from these efforts; influence of competing value orientations; exposure to differing models of policy analysis; and implications for professional practice including the role of social work in developing, implementing, and evaluating social programs. PREREQUISITE: SWRK 2910 and 2911. COREQUISITE: SWRK 3930.

**SWRK 3930. Social Work Research. (3).** History and methods of social work research including scientific thinking, application of statistical operations, and systematic approaches to acquisition of social work knowledge. PREREQUISITE: SWRK 2910 and 2911 and SOCI 3311.

**SWRK 4830. Field Instruction in Social Work I. (3).** Supervised internship in social service agency or program. *Minimum two days per week required.* PREREQUISITE: SWRK 3904. COREQUISITE: SWRK 3906 and 4840. (A-F, IP)

**SWRK 4831. Field Instruction in Social Work II. (4).** Continuation of supervised internship. *Minimum three days per week required.* PREREQUISITE: SWRK 4830 and 4840. COREQUISITE: SWRK 4841. (A-F, IP)

**SWRK 4833. Religion and Spirituality in Social Work Practice. (3).** Religion and spirituality in shaping belief systems, psychosocial development, development of social policy, significance of religious institutions in providing social services; influence of religion and spirituality on individual, family, community.

**SWRK 4840. Integrative Field Seminar I. (2).** Integration of social work theory with field instruction experiences. COREQUISITE: SWRK 4830 and 3906. **[I]**

**SWRK 4841. Integrative Field Seminar II. (2).** Continuation of SWRK 4840. COREQUISITE: SWRK 4831. [I]

**SWRK 4911-19. Special Topics in Social Work. (3).** Topics are varied and in online class listings. PREREQUISITE: SWRK 2911 or permission of instructor.

**SWRK 4933. Directed Individual Study. (1-4).** Directed advanced reading, field study and/or research in special areas of social work, not otherwise provided in curriculum. NOTE: no more than 4 hours may be taken in any one semester. May be repeated for maximum of 6 hours credit. PREREQUISITE: Social Work major and permission of director, Division of Social Work. (A-F, IP)

**SWRK 4934. Child Welfare Policy and Services. (3).** Historic overview and contemporary application of child welfare policy; problems in policy development; contemporary American child welfare services in both public and private domains. PREREQUISITE: SWRK 2910, 2911, and 3920.

## (TECH) TECHNOLOGY

### Department of Engineering Technology

RONALD LEE DAY, M.A., *Chair*
*Room 203, Engineering Technology Building*
*http://www.people.memphis.edu/~engtech/home.html*

**TECH 1010. Computer Applications In Technology. (3).** Introduction to computer applications using microcomputers networked to Tiger LAN and VAX; microcomputer applications include operating systems, spreadsheets, word-processing, BASIC, and VAX/Internet.

**TECH 1411. Introduction to Technology. (1).** Emphasis on engineering technology programs as to content and opportunities upon graduation; technical applications, calculations and activities related to various technological disciplines; approaches to basic research techniques and problem solving.

**TECH 1521. Graphics and Descriptive Geometry. (3).** Orthographic projections, sections, pictorials; drafting with instruments, sketching, and introduction to computer aided drafting. Auxiliary views and revolutions, profiles, vector graphics and developments. *Two lecture hours, three laboratory hours per week.*

**TECH 3044. Analysis for Engineering Technology. (4).** Application of mathematical, scientific, and engineering principles to solution of technology problems, using a variety of examples from various major areas in Technology; analyze and provide acceptable solutions to ascending order of well designed problems using language and techniques or related technological disciplines and selected areas of mathematics, such as algebra, trigonometry, calculus and differential equations. *Three lecture hours, three laboratory hours per week.* PREREQUISITE: MATH 1910. **[C]**

**TECH 3414. Construction Administration. (3).** Ethical practice, social responsibility, licensing, codes, and public regulation of contracting, specification writing and interpretation, functions of architect-engineer and owner, construction contracts, bonding, insurance, indemnification, labor agreements and jurisdictional procedures, joint venture and subcontract relationship.

**TECH 3451. Construction Surveying Methods. (3).** Methods, techniques and formulas necessary to establish controlling points at any construction site; both office and field procedures required to locate center lines and bounds of structures. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: permission of instructor.

**TECH 3691. Construction Estimating. (3).** Fundamentals of commercial and light frame estimating; emphasis given to conducting a quantity survey, including unit and overhead costs.

**TECH 3940. Analytic Approaches to Public Fire Protection. (3).** Systems analysis and its use and limitations in fire protection and other problem areas; illustrated with case studies and models using the systems approach to fire suppression and prevention. PREREQUISITE: admission restricted to students seeking B.P.S. degree in Fire Administration or Fire Prevention Technology. **[C]**

**TECH 3942. Fire Related Human Factors. (3).** Dynamics of human behavior in fire incidents related to building design, codes and ordinances, and other fire prevention practices. PREREQUISITE: admission restricted to students seeking B.P.S. degree in Fire Administration or Fire Prevention Technology.

**TECH 3944. Fire Protection Structure and Systems Design. (3).** Design principles involved in protection of structure from fire involvement empirical tests and prediction procedures; control detection, and suppression system design practices; fundamentals of hydraulic design of sprinkler and water spray systems with recent innovations. PREREQUISITE: admission restricted to students seeking B.P.S. degree in Fire Administration or Fire Prevention Technology.

**TECH 3945. Incendiary Fire Analysis and Investigation. (3).** Procedures and techniques for collection, comparison, and analysis of physical evidence related to fire origin; principles of evidence of ignition phenomenon and propagation variables; legislative, economic, psychological, and sociological variables of incendiary fire, role of insurance and government programs. PREREQUISITE: students of B.P.S. degree in Fire Administration or Fire Prevention Technology program.

**TECH 3946. Fire Dynamics. (3).** Fire propagation phenomenon in both fuel and air regulated phases; variables in pre- and post-flash over fire development; geometric, material, gaseous, fluid flow, and thermodynamic parameters; compartment and building fire models. PREREQUISITE: admission restricted to students seeking B.P.S. degree in Fire Administration or Fire Prevention Technology program.

**TECH 3947. Applications of Fire Research. (3).** Fire research and its application; transfer and implications of available research results for fire prevention and protection programs; national and international studies and research developments. PREREQUISITE: admission restricted to students seeking B.P.S. degree in Fire Administration or Fire Prevention Technology program.

**TECH 3948. Managerial Issues in Hazardous Materials. (3).** Examination of federal regulatory issues, hazard identification and vulnerability analysis, multi-agency contingency planning, response personnel, multi-agency response resources and systems; discussion of agency policies, public education and emergency information systems, health and safety issues, command post dynamics, strategic and tactical considerations, recovery and termination procedures. PREREQUISITE: admission restricted to students seeking B.P.S. degree in Fire Administration or Fire Prevention Technology program.

**TECH 4510-6510. Construction Planning and Scheduling. (3).** Principles of planning, scheduling, organizing, and controlling construction projects; studies in critical path method (CPM) and PERT, with resource leveling and financial scheduling; computer applications in CPM and PERT emphasized.

**TECH 4512. Soil Technology in Construction. (3).** Soil technology as applied to construction field; fundamental properties of soils with application to foundations, highways, retaining walls and slope stability; relationship between soil characteristics and geologic formations. *Two lecture hours, three laboratory hours per week.* PREREQUISITE: PHYS 2010, 2011.

**TECH 4520-6520. Construction Methods and Equipment. (3).** Theory and practice of construction operations, equipment utilization, construction methods, analysis of costs, crew and equipment.

**TECH 4999. Engineering Technology Projects. (1-3).** Independent investigation of engineering technology problems in consultation with instructor. May be repeated for a maximum of 6 hours credit. PREREQUISITE: senior standing. (A-F, IP)

## (THEA) THEATRE

### Department of Theatre and Dance

ROBERT A. HETHERINGTON, M.A., *Chair*
*Room 143, Theatre and Communication Building*
*THEATRELIB@cc.memphis.edu*

**NOTE: In addition to specific prerequisites, junior standing or permission of the department chair is a prerequisite for all 3000- and 4000-level courses in the Department of Theatre and Dance.**

**THEA 1030. Introduction to Theatre. (3). (1551).** Experiential, conceptual, historical, and cultural study of theatre as a unique form of artistic expression and mirror of human experiences and values throughout the world; survey of constituent elements of a theatrical work and its major forms of expression. Attendance at live theatre productions required. [G] ♦

**THEA 1411. Basic Oral Interpretation. (3).** Introduction to interpretation of literature in performance; develop and heighten performer's responsiveness to the literary text.

**THEA 1561. Introduction to Design. (3).** Historical and conceptual survey of basic elements of production-scenery, costumes, lighting, sound - and their relation to theatrical production process.

**THEA 2501. Stage Movement. (3).** Introduction to movement as basic element of actor's craft; focus on recognition, development, and un-

derstanding of natural physical actions and rhythms and their application to stage. [G]

**THEA 2511. Theatre Crafts. (3).** Lecture/laboratory covering all phases of craft skills and equipment involved in technical theatre production. Required lab work.

**THEA 2512. Introduction to Theatre Graphics. (3).** Introduction to graphic communication processes of technical theatre. Mechanical drafting and CAD for scenery, properties, sound and lighting design; poster and program graphics. **(Offered alternate years).**

**THEA 2515. Stage Make-up. (3).** Lecture/laboratory class in which fundamentals of theatrical make-up are studied through a series of make-up projects including corrective make-up, fantasy, mask and beard makeups. **(Offered alternate years).**

**THEA 2530. Acting for Non-Majors. (3).** Introduction to craft of acting; development of actor's individual potential through basic technique; performance of short scenes in class.

**THEA 2531. Basic Acting Techniques. (4).** First essential of acting study: exploration of the actor; class exercises to develop relaxation, concentration, imagination, and improvisation skills.

**THEA 2532. Character Development. (4).** Principles of role analysis through study of subtext, character motivation, and objectives. PREREQUISITE: THEA 2531 or permission of instructor.

**THEA 3212. Voice Production for the Performer. (4).** Techniques for freeing the vocal mechanism: breathing, phonation, movement to enhance the performer's craft.

**THEA 3213. Voice Articulation for the Performer. (3).** International Phonetic Alphabet; Standard American Dialect; exercises in articulation and dialects as techniques for conveying dramatic intention and character. May be taken to improve grade in COMM 1211.

**THEA 3412. Directing Experiments. (3).** Theatrical image; creative exercises in imaginative use of space, time, and materials as they relate to stage direction and design. **(Offered alternate years).**

**THEA 3505. Mime. (3).** Techniques, composition and exploration of various styles of mime. PREREQUISITE: THEA 2501, or permission of instructor.

**THEA 3506. Movement Styles. (3).** Techniques and choreography of the movement styles of various periods, with study in such areas as stage combat and masks. PREREQUISITE: THEA 3505, or permission of instructor.

**THEA 3511. Stagecraft. (3).** Lecture/laboratory includes theatre terminology, theatre forms, production organization, job descriptions, and safety; scenery construction to include painting, flat scenery, three-dimensional scenery, and introduction to steel materials. Required lab work. PREREQUISITE: THEA 2511. **(Offered alternate years).**

**THEA 3531. Scene Study. (4).** Development of ensemble work within scenes. May be repeated for a maximum of 8 hours credit with permission of instructor. PREREQUISITE: THEA 2532.

**THEA 3532. Advanced Scene Study. (4).** Continuation of 3531. Attention to material from modern classics. May be repeated for a maximum of 8 hours credit with permission of instructor. PREREQUISITE: THEA 3531.

**THEA 3551. Audition Preparation Performance Laboratory. (1).** Weekly meeting to review/critique actors' audition choices and progress. PREREQUISITE: permission of instructor.

**THEA 3561. Principles of Scene Design. (3).** Application of principles to various theatrical conventions and configurations. **(Offered alternate years).**

**THEA 3562. Principles of Costume Design. (3).** Techniques of costume design with special attention to character interpretation and design visualization. Open to non-majors with permission of instructor. **(Offered alternate years).**

**NOTE:** THEA 3601, 3602, 3603, 3604, 3605, 3606, 3607, 3608, and 3609 include preparation for and participation in departmental theatre productions. Individualized work is in the form of supervised laboratory situations. Running crews for season productions selected from participating labs. Each course may be repeated for a maximum of 3 hours credit with permission of the instructor.

**THEA 3601. Management and Publicity Production Laboratory. (1).**

**THEA 3602. Costumes Production Laboratory. (1).**

**THEA 3603. Lighting Production Laboratory. (1).**

**THEA 3604. Sound Production Laboratory. (1).**

**THEA 3605. Scenery Production Laboratory. (1).**

**THEA 3606. Props Production Laboratory. (1).**

**THEA 3607. Make-up Production Laboratory. (1).**

**THEA 3608. Dance Production Laboratory. (1).**

**THEA 3609. Stage Management Production Laboratory. (1).** May be repeated for a maximum of 3 hours credit with permission of instructor.

**THEA 4210-19-6210-19. Special Topics in Theatre. (1-3).** Topics are varied and in online class listings. May be repeated for a maximum of 9 hours credit.

**THEA 4401-6401. Children's Literature in Performance. (3).** Adaptation of Children's literature for performances in theatrical and educational settings; styles of literature, principles of performance and production of material designed for young audiences. May be repeated for a maximum of 6 hours credit with permission of instructor.

**THEA 4441. Performance Repertory. (3).** Group performance in dramatic and narrative theatre styles as well as dance and theatre movement. May be repeated for a maximum of 9 hours credit. PREREQUISITE: prospective students must audition for and be cast in the Memphis Moving Line Company.

**THEA 4455. Directing Narrative Theatre. (3).** Directing techniques for staging literary texts not originally written for the theatre; script adaptation of short stories, poetry, and non-fiction prose. Directing projects required. PREREQUISITE: THEA 4521, or permission of instructor. **(Offered alternate years).**

**THEA 4457-6457. Interpretive Styles. (3).** Exploration of performance style as it evolves from language, structure, and style of the literary text. Materials for performance will vary each semester and may alternate among the genres of prose fiction, poetry, and period drama. May be repeated for a maximum of 9 hours credit when content varies. PREREQUISITE: permission of instructor.

**THEA 4501-6501. Advanced Movement Styles. (3).** Advanced study in physical theatre styles. Varied semester topics: performance art; mask performance; fighting styles for period weapons; and physical theatre techniques for directors, choreographers, and teachers. May be repeated for a maximum of 6 hours credit when content varies. PREREQUISITE: permission of instructor.

**THEA 4503-6503. Creative Dramatics. (3).** Basic techniques and theories for use of dramatization in elementary and secondary education. Includes socio-drama, dramatization of school subjects and daily concerns, and improvisation and creation of dramatic plays.

**THEA 4514-6514. Theatrical Rendering Techniques. (3).** Materials and techniques for rendering theatrical space and scenic, costume, lighting, and properties design elements.

**THEA 4515-6515. Scene Painting. (3).** Lecture/laboratory covering techniques of painting scenery for stage. PREREQUISITE: THEA 3561. **(Offered alternate years).**

**THEA 4516-6516. Technical Direction. (3).** Lecture/ laboratory for theatre technicians includes production organization and safety, engineering, rigging, materials control and supply ordering. PREREQUISITE: THEA 3511. **(Offered alternate years).**

**THEA 4521. Principles of Stage Direction. (3).** Exploration of conceptual, planning and implementation skills of stage director from script interpretation to rehearsal and performance; attention to both traditional and non-traditional theatrical modes. Directing projects required. PREREQUISITE: THEA 3412, or permission of instructor. **(Offered alternate years).**

**THEA 4531-6531. Acting Styles. (4).** Development of acting styles as influenced by environments of historical periods. May be repeated for maximum of 8 hours credit. PREREQUISITE: THEA 3532. **(Offered alternate years).**

**THEA 4532-6532. Advanced Acting Styles. (4).** Continued work in acting styles. May be repeated for maximum of 8 hours credit. PREREQUISITE: THEA 4531. **(Offered alternate years).**

**THEA 4541. Internship. (1-6).** Supervised work in actual university, community, or professional theatre productions on internship basis. Credit varies with amount of time and responsibility involved. May be repeated for a maximum of 12 hours credit. PREREQUISITE: permission of Director of Theatre. (A-F, IP)

**THEA 4551-6551. Theatre History-Classic. (3).** Shaping forces and theatrical forms from primitive civilizations to the Renaissance in both Western and non-Western cultures, with emphasis on the former. **(Offered alternate years).**

**THEA 4552-6552. Theatre History-Modern. (3).** Continuation of 4551 to present. **(Offered alternate years).**

**THEA 4553. Directed Individual Studies in Theatre. (1-3).** For advanced student who wishes to do concentrated study in specific area of theatre. May be repeated for maximum of 9 hours credit. PREREQUISITE: permission of instructor.

**THEA 4554-6554. Visual History for Theatrical Design I. (3).** Design aesthetics of selected historical periods from ancient times through Victorian era as applied to theatrical design. PREREQUISITE: permission of instructor. **(Offered alternate years).**

**THEA 4555-6555. Scenic Technology. (3).** Lecture/laboratory using traditional and contemporary materials and scenic techniques including rigging, metals and welding, wood working, and plastics. PREREQUISITE: THEA 3511, or permission of instructor. **(Offered alternate years).**

**THEA 4556-6556. Lighting Technology. (3).** Study of technical principles that support areas of theatrical lighting design; instrumentation and equipment, electricity and electronics, control systems, operational and maintenance principles and procedures for stage electricians. **(Offered alternate years).**

**THEA 4557-6557. Costume Technology. (3).** Intermediate costume construction techniques employing both traditional and experimental methods for sewing; brings costume design from concept to reality. PREREQUISITE: THEA 3562, or permission of instructor. **(Offered alternate years).**

**THEA 4558-6558. Visual History for Theatrical Design II. (3).** Design aesthetics of selected historical periods from Victorian era through 20th century as applied to theatrical design. PREREQUISITE: permission of instructor. **(Offered alternate years).**

**THEA 4559-6559. Theatre of the African Diaspora. (3).** Exploration of selected playwrights and theatre practitioners of West and South Africa, Caribbean, and African-American descent. Course includes performance projects. May be repeated for a maximum of 6 hours credit when content varies. PREREQUISITE: permission of instructor. **(Offered alternate years).**

**THEA 4561. Scenic Design Studio. (3).** Application of design principles to study of analysis, design process, and graphic skills; creative expression and portfolio development also stressed. **(Offered alternate years).**

**THEA 4562. Lighting Design Studio. (3).** Lecture/seminar/practicum investigation of art of lighting design; script analysis, design approaches and methodologies, procedures and practices for working designers, cue techniques, design styles and forms, and criticism of lighting design. Research project work and staged scenes required. PREREQUISITE: THEA 4556, or permission of instructor. **(Offered alternate years).**

**THEA 4563. Costume Design Studio. (3).** Theories and techniques of aesthetics of costume design as applied to contemporary theatre; script analysis for costume design; character and period interpretation through line, color, and fabric. **(Offered alternate years).**

**THEA 4571-6571. Playwriting. (3).** Theory and principles of writing plays for stage. Practice in writing either short or long play. May be repeated for maximum of 9 hours credit. PREREQUISITE: permission of instructor. **(Offered alternate years). [W]**

**THEA 4582. Script Interpretation. (3).** Exploration of the script as blueprint for realization of artistic stage image. Special attention given to plot, structure, character treatment, and language style as they relate to performance, direction, and scenography. PREREQUISITE: major or minor in Department of Theatre and Dance. **(Offered alternate years). [W,I]**

**THEA 4591. Theatre Management. (3).** Procedures and practices for stage management; theatrical production management; box office; publicity and promotion for theatre and performing arts; comparative study of commercial, educational, and amateur theatre operations. **(Offered alternate years). [C]**

**THEA 4592-6592. Theatre Architecture and Facilities Planning. (3).** Processes and techniques employed by theatre planners in design and construction/renovation of theatrical spaces and structures; survey of theatre forms, historical development of theatrical structures and spaces, programming methods and procedures, specification, renovation techniques, multi-use structure concepts, and consultation procedures and practices. PREREQUISITE: permission of instructor. **(Offered alternate years).**

**THEA 4595-6595. Sound Technology. (3).** Technical principles that support areas of theatrical sound design; digital and analog equipment, audio signal theory and technologies, systems design, software, and operational principles and procedures for theatrical sound engineers. **(Offered alternate years).**

**THEA 4596. Sound Design Studio. (3).** Lecture/seminar/practicum investigation of the art of theatrical sound design; script analysis, creative design processes and aesthetics, cue techniques, design styles and forms, procedures and practices for working designers and criticism of sound design. PREREQUISITE: THEA 4595, or permission of instructor. **(Offered alternate years).**

**THEA 4631-6631. Acting for Film and Television. (4).** Educational experience for actor in media of film and television, concentrating on dramatic, commercial and documentary areas. PREREQUISITE: permission of instructor. **(Offered alternate years).**

**THEA 4980. Honors Studies. (3).** Reserved for students enrolled in Theatre and Dance Honors Program. May be repeated for a maximum of 15 hours credit. PREREQUISITE: permission of department chair.

**THEA 4982. Honors Seminar. (3).** Intensive study of particular problems in theatre and dance. May be repeated for a maximum of 12 hours when topic varies. PREREQUISITE: permission of department chair(A-F, IP)

**THEA 4999. Senior Honors Thesis. (3).** Supervised independent research project. Open only to students enrolled in the Theatre and Dance Honors Program. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of department chair. (A-F, IP)

## (UNHP) UNIVERSITY HONORS PROGRAM

MELINDA L. JONES, Ph.D., *Director*
*Room 404, Jones Hall*

**UNHP 1100. The Honors Forum. (1).** Weekly meeting of Honors students. Discussion led by faculty and/or students on various topics. Honors credit requires grade of "B" (3.0). May not be repeated to improve former grade.

**UNHP 3114. Honors Thesis Workshop. (1).** A series of weekly meetings to provide prospective Honors thesis writers with the background and resources necessary to produce quality independent research. PREREQUISITE: third-year standing in Honors, or permission of the Director of the University Honors Program. (S/U).

**UNHP 3250-3299. Special Topics. (1-3).** To accommodate student interests and faculty inspiration. May feature scholars-in-residence, museum exhibits, or other timely opportunities. Innovation in content and format encouraged. May apply toward Honors Certificate. May

be repeated for credit as topic varies. May not be repeated to improve a former grade. Topics are varied and in online class listings.

**UNHP 3407. Evolutionary Perspectives. (3).** Principles of anthropology, biology, chemistry, and geology as applied to evolutionary thoughts and processes. Three lecture hours per week. PREREQUISITE: University General Education Program Natural Science Sequence.

**UNHP 4150-4199. Contemporary Issues. (3).** Selected contemporary issues to be approached in terms of demographic, social, economic, political, cultural, and historical dimensions; perspectives from social sciences and humanities; emphasis on social policies as problem solving strategies. Varied topics based on broad thematic areas such as public education; race and ethnic relations; criminal justice system; religion in public life; role of media in political discussion. May apply toward Honors Certificate. May be repeated for credit as topic varies. May not be repeated to improve a former grade.

**UNHP 4250-4299. Cross-Cultural Perspectives. (3).** Emphasis on global environment; area study or thematic approach with consideration of demographic, social, economic, political, cultural, and historical dimensions; perspectives from social sciences and humanities. May include such topics and areas as concept of the Third World, the non-western mind, the Middle East, Eastern Europe, Japan, or post-colonial Africa. May apply toward Honors Certificate. May be repeated for credit as topic varies. May not be repeated to improve a former grade.

**UNHP 4302. Mind, Brain, and Intelligence, Honors. (3). (Same as PSYC 4305, UNIV 4520).** Interdisciplinary studies of cognition, behavior, emotion, intelligence, and brain mechanisms; synthesis of research contributions from cognitive science, neuroscience, artificial intelligence, and philosophy.

**UNHP 4350-4399. Science and Technology. (3).** Emphasis on relationship between science and technological innovation on the one hand and ethics, values, and public policy on the other. Includes basic science content suitable for non-science majors, as well as perspectives from social sciences and humanities. May include varied topics such as environmental issues, biomedical engineering, space program, artificial intelligence, human factors analysis, the mind and the brain. May apply toward Honors Certificate. May be repeated for credit as topic varies. May not be repeated to improve a former grade.

**UNHP 4404. Holocaust Studies. (3). (Same as JDST 4511, UNIV 4511).** Synthesizing knowledge and methodologies from several disciplines; contexts and implications of the Holocaust; encompass periods before, during, and after the event to explore questions of human values and responsibility; research paper, journal, writing for oral presentation, and essay exam. Intended for seniors. **[W,I]**

**UNHP 4450-4499. Interdisciplinary Special Topics. (3).** Themes and topics that lend themselves to interdisciplinary discussion and analysis. Emphasis on texts and primary sources, as well as innovative teaching formats. May be team taught by faculty from two or more disciplines. May apply toward Honors Certificate. May be repeated for credit as topic varies. May not be repeated to improve a former grade. Topics are varied and in online class listings.

**UNHP 4900. Advanced Honors Projects. (1-3).** Designed for individuals or small groups of students working collaboratively. Students encouraged to design own projects. May include reading, research, discussion group, or experiential projects. Advanced projects assume sufficient background for advanced level. Credit varies according to project. No more than 3 hours may apply toward Honors Certificate. Application to department and college honors programs at their discretion. Letter grade unless student application for credit/no credit approved before registration. May be repeated for a maximum of 9 hours credit. May not be repeated to improve a former grade. (A-F, IP)

**UNHP 4999. Honors Thesis. (3).** In conjunction with a faculty mentor, most often from student's major department. Guidelines for students and faculty and applications available from Honors Office. Preliminary applications should be completed two semesters in advance. Formal applications due before final examinations week in semester preceding semester in which credit sought. Letter grade unless student application for credit/no credit approved before registration. Honors credit requires minimum grade of "B" (3.0). May not be repeated to improve a former grade. (A-F, IP)

## (UNIV) University College

DAN LATTIMORE, Ph.D., *Dean*
*Room G-1, Johnson Hall*

***Additional fees are charged for some University College lecture and laboratory courses.*** **See the online class listings or the Expenses section of the Bulletin.**

**UNIV 1005. Directed Study. (1-3).** Directed study at introductory level. Student may seek permission to study under faculty direction in an area not routinely taught. May be repeated for maximum of 6 hours credit. PREREQUISITE: approval of Out-of-Class Learning and Baccalaureate Contracts. (A-F, IP)

**UNIV 1610. Natural Science I. (4).** Development of universe; origin of elements and species; development of natural laws and their influence on cultural development of humankind; potentials and limitations of science explored. *Three lecture hours, two laboratory hours per week.* **[G]♦**

**UNIV 1611. Natural Science II. (4).** Concept of origin of universe and development of scientific thought; ways in which scientists develop knowledge of distant past; degrees of certainty possible to scientific investigation; possible conflicts between scientific thinking and human institutions explored. *Three lecture hours, two laboratory hours per week.* **[G] ♦**

**UNIV 2110. Field Experience. (1-6).** Supervised on-site training in basic skills. May be repeated up to a maximum of 6 hours. PREREQUISITE: Approval of Out-of-Class Learning and Baccalaureate Contracts. (S/U).

**UNIV 2304. Gender and Society. (3).** Sources, development, and effect of gender hierarchy on self-concept, quality of life, and ability to effect social change; subordination of women of different classes, races, and ethnicities across nationalities, cultures, and centuries; symbol, myth, and psychology in human development and gender divisions of power within historical struggle for control of world's wealth. **[G]**

**UNIV 2850. Religions of Abraham: Judaism, Christianity, Islam. (3).** Survey of development of several Near Eastern religious traditions; consideration of intellectual relationships among them. **[G] ♦**

**UNIV 2860. Historical/Philosophical Perspectives on Cultural Confrontations. (3).** Interdisciplinary examination of causes and effects of conflicts between and within cultures. Examines notion of cultural unity, issues of cultural identify, and categories used to construct cultural positions; European, African, Asian, and Native-American cultures studied in order to assess historical and philosophical viewpoints that influence understandings of contemporary society.

**UNIV 3200. Aviation Administration. (3).** Administrative principles as applied to airport operations, general aviation, government operations and enforcement, airline companies, and manufacturing companies; emphasis upon Federal Aviation Administration regulations that govern and guide the administrator in these areas.

**UNIV 3300. Medical Illustration Techniques I. (3).** Special techniques used by illustrators working in medical settings.

**UNIV 3301. Medical Illustration Techniques II. (3).** Further instruction in special techniques used by illustrators working in medical settings. Work with case problems.

**UNIV 3302. Biomedical Photography. (3).** Special techniques used by photographers working in medical settings.

**UNIV 3500-3599. Thematic Studies. (3-9).** Interdisciplinary courses about significant problems, themes, or ideas.

**UNIV 3527. Making the Humane City. (6). [W]**

**UNIV 3531. American Experience: Images and Narrative. (3).** Organized around "images" and "narratives"; utilizes a variety of cultural materials to enhance appreciation of the peoples and experiences that define the term "American."

**UNIV 3580. Hebrew and Greek Legacy. (3).** Interdisciplinary examination of salient ideas, values, and traditions of ancient Hebraic and Greek cultures, with emphasis on those ideas and values that have most significantly influenced the modern world; understanding of ideas and values enhanced through comparison with selected non-Western traditions. **[G]** ♦

**UNIV 3581. Faith, Reason, and Imagination. (3).** Interdisciplinary examination of religious, rationalist, and aesthetic viewpoints as distinctive ways of understanding what is fundamental to human experience; exploration of historical development of each of these modes of understanding and examination of tensions that exist among them in modern world. **[G]**♦

**UNIV 3700-3739. Special Topics. (1-6).** Topics are varied and in online class listings.

**UNIV 4110. Internship. (3-6).** Supervised training in work related to student's educational objectives. May be repeated for a maximum of 12 hours credit. PREREQUISITE: approval of Out-of-Class Learning and Baccalaureate Contracts. (S/U).

**UNIV 4380. Independent Study. (1-3).** Directed individual study or research. Students who have identified area of study pertinent to their coordinated study program, that is not routinely taught, may pursue the study under direction of faculty member. May be repeated for a maximum of 6 hours credit. PREREQUISITE: approval of Out-of-Class Learning and Baccalaureate Contracts. (A-F, IP)

**UNIV 4500-4599. Advanced Thematic Studies. (3-9).** Advanced interdisciplinary courses about significant problems, themes, or ideas.

**UNIV 4511. Holocaust Studies. (3). (Same as JDST 4511, UNHP 4404).** Synthesizing knowledge and methodologies from several disciplines; contexts and implications of the Holocaust; encompass periods before, during, and after the event to explore questions of human values and responsibility; research paper, journal, writing for oral presentation, and essay exam. Intended for seniors. **[W,I]**

**UNIV 4520. Mind, Brain, and Intelligence. (3). (Same as PSYC 4305, UNHP 4302).**

**UNIV 4529. Character and Society in Contemporary America. (6). (3529). [W, I]**

**UNIV 4700-09. Advanced Special Topics. (3-6).** Topics are varied and in online class listings.

**UNIV 4830. Israeli/Arab Conflict. (3). (Same as JDST 4830).** Historical, political, cultural dimensions of tensions that have existed between Israelis and Arabs since the founding of the State of Israel with attention to current situation.

**UNIV 4990. Project Planning Seminar. (1).** Selected and individualized methodology related to identifying, planning, conducting, analyzing, and reporting research related to the culminating special project. PREREQUISITE: Senior Standing and approved baccalaureate contract or interdisciplinary degree guidelines and permission of Associate Dean. (S/U).

**UNIV 4995. Special Project. (3 or 6).** Academic research or other creative activity resulting in tangible project to demonstrate synthesis of student's Coordinated Study. PREREQUISITE: Completion of UNIV 4990 or equivalent and approval of a learning contract for the project. (A-F,IP) **[I]**

## (UNIV) EXPERIENTIAL LEARNING

A portfolio describing and documenting knowledge gained through experience or non-traditional instruction may be prepared by a University College student for assessment by a faculty member. This learning must be related to the Coordinated Study. (See Expenses and Aid and Academic Regulations sections for more details.) That faculty assessor recommends the descriptive title, level, and amount of credit to be assigned by the dean of University College. A maximum of 31 hours may be applied to a degree. Credit is posted to the student's transcript as follows.

**UNIV 1900. Introductory Level Experiential Learning in (descriptive title).**

**UNIV 2900. Intermediate Level Experiential Learning in (descriptive title).**

**UNIV 3900. Advanced Level Experiential Learning in (descriptive title).**

## (WMST) WOMEN'S STUDIES

### Interdisciplinary Studies Office

M. ALLISON GRAHAM, Ph.D., *Director*

*Room 213, Mitchell Hall*

*http://cas.memphis.edu/~isc/wmst/*

**WMST 2100. Introduction to Women's Studies. (3).** Exploration of racially diverse women's experience, focus on contemporary issues; overview of different disciplinary and theoretical approaches to understanding women's status.

**WMST 4340. Independent Study. (3).** Readings and writing assignments designed to further student's understanding of specialized area within women's studies. (A-F, IP)

**WMST 4380-99. Special Topics in Women's Studies. (3).** Topics are varied and in online class listings.

# 8. Faculty and Staff

## UNIVERSITY ADMINISTRATION

SHIRLEY C. RAINES, Ed.D., President
RALPH J. FAUDREE, Ph.D., Provost
CHARLES LEE, Vice President for Business and Finance
ROSIE P. BINGHAM, Ph.D., Vice President for Student Affairs
JAMES I. PENROD, Ed.D., Vice President for Information Systems and Chief Information Officer
ANDREW MEYERS, Ph.D., Interim Vice Provost for Research
JOHN R. HADDOCK, Ph.D., Interim Vice Provost for Academic Affairs
DAN L. LATTIMORE, Ph.D., Vice Provost for Extended Programs and Dean of University College
HENRY A. KURTZ, Ph.D., Dean, College of Arts and Sciences
JOHN PEPIN, Ph.D., Dean, Fogelman College of Business and Economics
RICHARD R. RANTA, Ph.D., Dean, College of Communication and Fine Arts
RIC A. HOVDA, Ph.D., Dean, College of Education
RICHARD C. WARDER, JR., Ph.D., Dean, Herff College of Engineering
TONI BARGAGLIOTTI, D.N.Sc., Dean, Loewenberg School of Nursing
DONALD J. POLDEN, J.D., Dean, Cecil C. Humphreys School of Law
SYLVERNA V. FORD, Ph.D., Dean of Libraries

## THE COLLEGES AND DEPARTMENTS

### THE COLLEGE OF ARTS AND SCIENCES

HENRY A. KURTZ, Ph.D., Dean
LINDA A. BENNETT, Ph.D., Associate Dean
WILLIAM J. THOMPSON, Ph.D., Assistant Dean
JENNIFER WAGNER-LAWLER, Ph.D., Associate Dean
MELISSA BUCHNER, M.A., Director of Administration
PATSY KRECH, M.Ed., Director of Undergraduate Advising
LISA ELDIN, MA., Pre-Professional Advisor
MARCIA TAYLOR, M.A., Assistant to the Dean

#### AEROSPACE STUDIES

CHARLIE R. YOUNG, M.P.A., Lt. Col., USAF, *Professor of Aerospace Studies*

TRAVIS J. DOWNING (2001), Major, United States Air Force; Assistant Professor: B.S., 1991, United States Air Force Academy; M.A., 2001, University of Oklahoma

MATTHEW R. BERG (2002), Captain, United States Air Force; Assistant Professor; B.S. 1997, United States Air Force Academy

KATHERYN M. ALLEN (2000), Staff Sergeant, United States Air Force; Noncommissioned Officer in Charge of Personnel

KAREN J. GONZALEZ (2001) Staff Sergeant, United States Air Force; Noncommissioned Officer in Charge of Information Management

CHARLIE R. YOUNG (2002), Lieutenant Colonel, United States Air Force; Professor of Aerospace Studies, B.S., 1983, University of Mississippi; M.P.A., 1994, Georgia Southern University

#### ANTHROPOLOGY

DAVID H. DYE, Ph.D., *Chair*

LINDA A. BENNETT (1986), Professor and Associate Dean for Graduate Studies and Research: B. A., 1965, Clarion State College; M.A., 1966, Indiana University; Ph.D., 1976, American University

MELISSA CHECKER (2002), Assistant Professor: B.A., 1990, University of Pennsylvania; M.A., 1997, M.Phil., 1998, Ph.D., 2002, New York University

DAVID H. DYE (1981), Associate Professor, Chair: B.A., 1972, Memphis State University; M.A., 1976, Louisiana State University; Ph.D., 1980, Washington University

RUTHBETH D. FINERMAN (1985), Associate Professor: B.A., 1977, M. A., 1979, Ph.D., 1985, University of California at Los Angeles

JAY D. FRANKLIN (2002), Assistant Professor: B.A., 1992, M.A., 1999, Ph.D., 2002, The University of Tennessee

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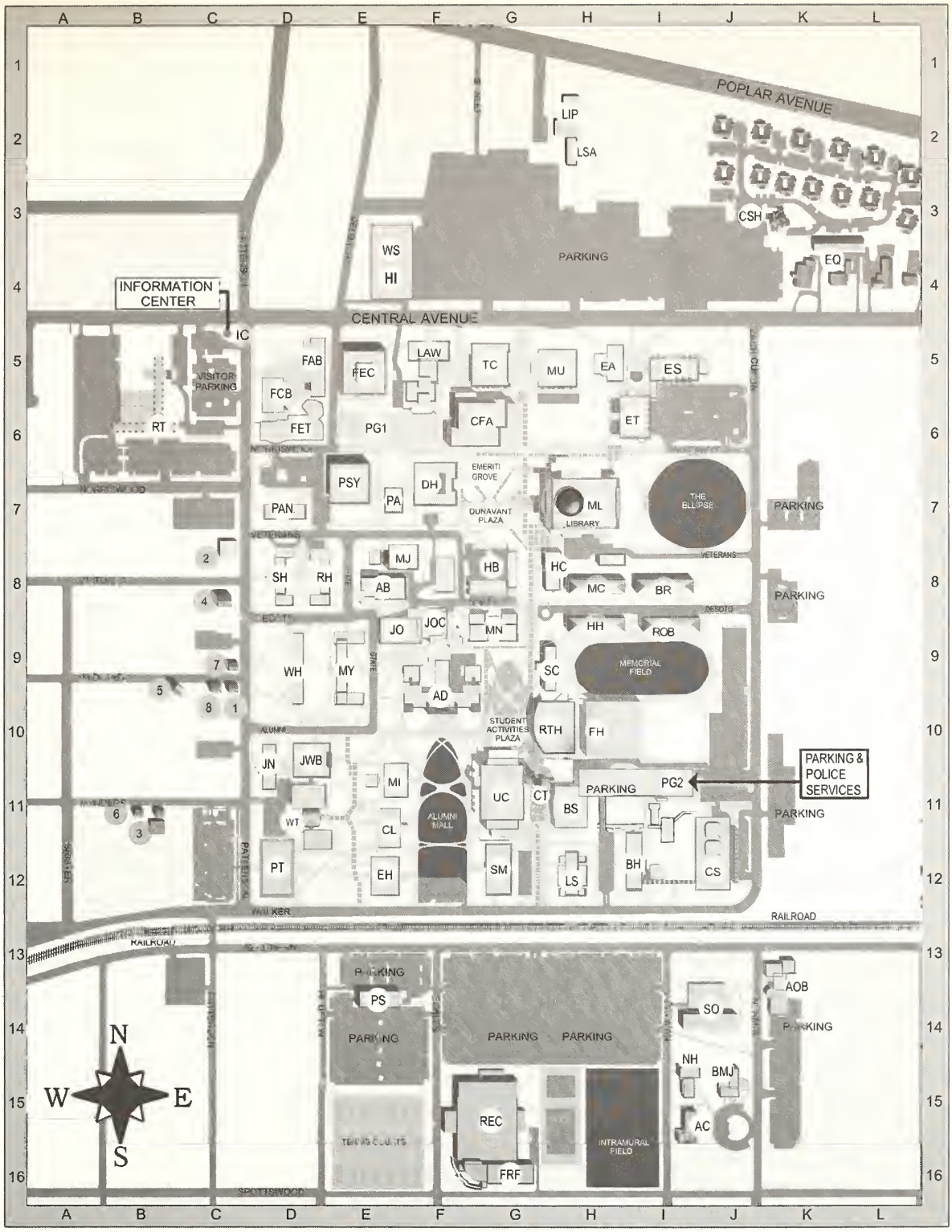


**BUILDINGS**

| | | |
|---|---|---|
| AD | Administration Building | F-9 |
| AC | Alumni Center | I-15 |
| AB | Art Building | E-8 |
| AOB | Athletic Office Building | K-13 |
| BH | Ball Hall, E. C. | I-12 |
| BMJ | Billy Mac Jones Building | J-15 |
| BS | Services Court Building (Bookstore),V. Lane Rawlins | H-11 |
| JWB | Binster Hall, John Willard | D-10 |
| BR | Browning Hall | I-8 |
| CS | Campus School | J-12 |
| CL | Clement Hall | E-11 |
| CFA | Communication & Fine Arts Building | G-6 |
| CT | Clock Tower, V. Lane Rawlins | G-11 |
| DH | Dunn Hall | F-7 |
| EQ | Earthquake Research & Information, Center for | K-4 |
| EH | Ellington Hall | E-12 |
| EA | Engineering Administration Building | H-5 |
| ES | Engineering Science Building | I-5 |
| ET | Engineering Technology Building | I-6 |
| FET | FedEx Technology Institute | D-6 |
| FH | Fieldhouse, Elma Neal Roane | H-10 |
| FRF | Finch Recreation Facility, Larry O. | G-16 |
| FAB | Fogelman College of Bus. & Admin. Bldg. | D-5 |
| FCB | Fogelman College of Bus & Econ. Classroom Bldg. | D-5 |
| FEC | Fogelman Executive Center | E-5 |
| HB | Herzog Building, Ray L. | G-8 |
| HC | Hudson Health Center | H-8 |
| HH | Hayden Hall | H-9 |
| HI | Holiday Inn at Wilson School | E-4 |
| IC | Information Center | C-5 |
| JN | Johnson Hall | D-10 |
| JO | Jones Hall | F-9 |
| JOC | Jones Hall Cafeteria | F-9 |
| LAW | Law, Cecil C. Humphreys School of | F-5 |
| LS | Life Sciences Building | H-12 |
| LIP | Lipman School, Barbara K | H-2 |
| MN | Manning Hall | G-9 |
| MC | McCord Hall | H-8 |
| ML | McWherter Library, Ned R. | H-7 |
| MJ | Meeman Journalism Building, Edward J. | F-8 |
| MI | Mitchell Hall | E-11 |
| MU | Music Building | H-5 |
| NH | Newport Hall | I-15 |
| PAN | Panhellenic Building | D-7 |
| PG1 | Parking Garage, Deloach | E-6 |
| PG2 | Parking Garage, Zach Curlin | H-11 |
| PT | Patterson Hall | D-12 |
| PS | Printing Services Building | E-14 |
| PA | Psychology Auditorium | E-7 |
| PSY | Psychology Building | E-7 |
| ROB | Robison Hall | I-9 |
| RTH | Rose Theatre Lecture Hall, Michael D. | H-10 |
| SC | Scates Hall | H-9 |
| SM | Smith Hall, J. M. | G-12 |
| REC | Student Recreation and Fitness Center | G-15 |
| TC | Theatre & Communication Building | G-5 |
| UC | University Center | G-11 |
| WT | Wilder Tower, John S. | E-11 |
| WS | Kemmons Wilson School of Hospitality and Resort Management | E-4 |

**RESIDENCE HALLS**

| | | |
|---|---|---|
| CSH | Carpenter Student Housing Complex, Thomas G | J-3 |
| MY | Mynders Hall | E-9 |
| RH | Rawls Hall | D-8 |
| RT | Richardson Towers | B-5 |
| SH | Smith Hall, Nellie Angel | D-8 |
| SO | South Hall | J-14 |
| WH | West Hall ( aka West Mynders Hall ) | D-9 |

**RELIGIOUS ORGANIZATIONS**

| | | |
|---|---|---|
| 1 | Baptist Student Union | C-10 |
| 2 | Barth House Episcopal Center | C-8 |
| 3 | Catholic Student Center | B-11 |
| 4 | Christian Student Center (Church of Christ) | C-8 |
| 5 | Jewish Student Union | C-9 |
| 6 | Muslim Student Association | B-11 |
| 7 | Presbyterian Place (River's Edge) | C-9 |
| 8 | Wesley Foundation (United Methodist) | C-10 |

April 2003

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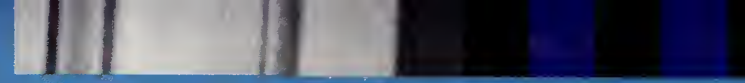
It is committed to education of non-racially identifiable student body.



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